

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA



**FILED**

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In Attendance:    PRESIDENT ALICE REYNOLDS  
                         COMMISSIONER DARCIE L. HOUCK  
                         COMMISSIONER CLIFFORD RECHTSCHAFFEN  
                         COMMISSIONER GENEVIEVE SHIROMA  
                         COMMISSIONER JOHN REYNOLDS

ADMINISTRATIVE LAW JUDGE KELLY A. HYMES, presiding

Order Instituting Rulemaking to	)	ORAL ARGUMENT
Revisit Net Energy Metering Tariffs	)	
Pursuant to Decision 16-01-044, and	)	
to Address Other Issues Related to	)	
Net Energy Metering	)	
	)	Rulemaking
	)	20-08-020
	)	
	)	
	)	

REPORTERS' TRANSCRIPT  
Virtual Proceeding  
November 16, 2022  
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Reported by:    Ashleigh E. Button, CSR No. 14013  
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VIRTUAL PROCEEDING

NOVEMBER 16, 2022 - 10:11 A.M.

\* \* \* \* \*

ADMINISTRATIVE LAW JUDGE HYMES: The Commission will come to order. We will be on the record.

Good morning, everyone. Again, I am Kelly Hymes, the assigned administrative law judge to Rulemaking 20-08-020, the Rulemaking to Revisit Net Energy Metering Tariff Pursuant to Decision 16-01-044 and to address other issues related to net energy metering.

This is the time and place for parties to present oral arguments in this proceeding.

Pursuant to Commission Rules of Practice and Procedure Rule 13.14(b), in ratesetting proceedings in which the assigned Commissioner has determined that a hearing is required, a party has the right to make an oral argument before the Commission provided that that party makes such request by motion no later than the time for filing opening briefs. A quorum of the Commission shall be present.

On August 31, 2021, the California Solar and Storage Association and the Solar Energy Industry Association jointly with Vote

1 Solar requested oral argument in their  
2 opening briefs. On November 4, 2022, I  
3 issued a ruling noticing today's oral  
4 argument hearing and instructing parties to  
5 confirm their participation by sending an  
6 e-mail to me and identifying the name and  
7 contact information of a party  
8 representative.

9 On November 10, 2022, I sent a  
10 procedural e-mail confirming the list and  
11 order of speakers for today.

12 For the record, the order of party  
13 representatives participating today are as  
14 follows:

15 Carla Peterman for Pacific Gas and  
16 Electric Company, San Diego Gas & Electric  
17 Company, and Southern California Edison  
18 Company, also referred to as the Three Large  
19 Investor-Owned Utilities;

20 We also have Susan Tierney for the  
21 Three Large Investor-Owned Utilities;

22 Claire Broome, for 350 Bay Area;  
23 Ann Trowbridge for Agricultural  
24 Energy Consumers Association;

25 Andrew Gong for Aurora Solar;

26 Kevin Johnston for California Farm  
27 Bureau Federation;

28 Brad Heavner for California Solar

1 and Storage Association;  
2 Nancy Rader for California Wind  
3 Energy Association;  
4 Michael Boyd for Californians for  
5 Renewable Energy, Inc.;  
6 Roger Lin for Center for Biological  
7 Diversity;  
8 Ben Schwartz for Clean Coalition,  
9 Rachael Koss for Coalition of  
10 California Utility Employees;  
11 Raghu Belur for Enphase Energy;  
12 Steve Sherr for Foundation  
13 Windpower;  
14 Stephen Campbell for GRID  
15 Alternatives;  
16 Scott Murtishaw for Independent  
17 Energy Producers Association;  
18 Allie Detrio for Ivy Energy;  
19 Mohit Chhabra for Natural Resources  
20 Defense Council;  
21 Ellison Folk for Protect Our  
22 Communities Foundation;  
23 Matt Baker for Public Advocates  
24 Office;  
25 Katie Ramsey for Sierra Club;  
26 Ariel Strauss for Small Business  
27 Utility Advocates;  
28 Sean Gallagher for Solar Energy

1 Industries Association;

2 Matthew Freedman for The Utility  
3 Reform Network;

4 Sachu Constantine for Vote Solar;  
5 Bill Allayaud for Environmental  
6 Working Group;

7 And Charles Adams for Albion Power  
8 Company.

9 For efficient use of our time, prior  
10 to going on the record today, a roll call was  
11 conducted and these representatives are  
12 present and ready to proceed. I remind these  
13 representatives that they each have two  
14 minutes and 30 seconds to provide their oral  
15 argument with the following exceptions:

16 San Diego Gas & Electric Company has  
17 ceded their time to Pacific Gas and Electric  
18 Company and Southern California Edison  
19 Company. Hence, the two representatives of  
20 the Large Investor-Owned Utilities will each  
21 have three minutes and 45 minutes to present.

22 Lastly, Environmental Working Group  
23 and Albion Power Company each responded late  
24 to my ruling, and, having showed good cause,  
25 I granted the two late requests; however,  
26 these parties will only have one minute and  
27 15 seconds to speak.

28 Also for the record, pursuant to

1 Rule 13.14, the following Commissioners are  
2 present today: Assigned Commissioner  
3 President Alice Reynolds, Commissioner Darcie  
4 Houck, Commissioner Cliff Rechtschaffen,  
5 Commissioner John Reynolds, and Commissioner  
6 Genevieve Shiroma. Thus, we do have a quorum  
7 of Commissioners present.

8 Before we begin with oral argument,  
9 I understand that President Reynolds has  
10 opening remarks to make.

11 President Reynolds, you may proceed.

12 PRESIDENT REYNOLDS: Thank you, Judge  
13 Hymes, and good morning.

14 I'm pleased to welcome everyone to  
15 the oral argument today; welcome to the many  
16 parties who are participating and to the  
17 members of the public who are listening in.

18 I do want to make a few brief  
19 remarks. Net energy metering, or NEM, has  
20 had a long history in California from when it  
21 was first established in 1995 through the  
22 updates required by the legislation over the  
23 years, to the moment we find ourselves in  
24 today over 25 years later.

25 I want to be clear that we have  
26 carefully considered the evidence presented  
27 by the parties over the course of this  
28 proceeding to arrive at the element in the

1 proposed decision issued last week by Judge  
2 Hymes.

3           The proposed decision would take us  
4 forward into a clean energy future. We all  
5 know that we need one that encourages  
6 electrification efforts such as installing  
7 heat pump water heaters and battery storage  
8 to support grid reliability during periods of  
9 peak demand and one that controls costs for  
10 all Californians.

11           The proposed decision would do this  
12 in three key ways; one, by applying high  
13 differential electrification rates to  
14 residential customers that install solar and  
15 solar paired with storage; two, by valuing  
16 export at the avoided cost calculator; and,  
17 three, by pairing this decision with a  
18 hundred million dollars in up-front  
19 incentives for new solar plus storage and  
20 stand-alone storage customers.

21           The proposed decision would also  
22 continue to promote rooftop solar adoption  
23 through a transitional mechanism called the  
24 ACC Plus that provides extra bill credits for  
25 customers that they can lock in for nine  
26 years.

27           The ACC Plus would be available to  
28 new solar customers for five years to allow



1 the industry to transition to a marketplace  
2 that is centered on a solar plus battery  
3 storage sales model.

4 The proposed decision also advances  
5 equity in a few key ways. First, it provides  
6 over twice as many extra bill credits to  
7 customers enrolled in the CARE and FERA  
8 low-income assistance programs to ensure an  
9 equivalent pay-back period as all other  
10 customers.

11 Second, as I mentioned previously,  
12 the proposed decision would work in  
13 conjunction with an additional 900 million  
14 and up-front incentives from the general fund  
15 for residential customers that install  
16 battery storage. 70 percent of this funding  
17 is set aside for low-income customers.

18 And, third, the new net billing  
19 tariff by paying more -- by more accurately  
20 paying for the value of solar exports would  
21 control costs for customers who do not have  
22 solar on their homes. These customers are  
23 disproportionately lower income as many  
24 studies have shown.

25 With that said, I'm looking forward  
26 to hearing each party's constructive feedback  
27 on the specific elements of the proposed  
28 decision, and we will be taking this oral

1 argument into consideration as we -- with an  
2 eye towards moving forward to a new future  
3 where distributed energy resources are better  
4 in line met with our critical climate and  
5 reliability goals and costs of this  
6 technology are more equitably re-allocated.

7 Last, I do want to note that I very  
8 much appreciate that we'll be hearing from a  
9 diverse set of parties here today from  
10 ratepayer advocates to solar industry  
11 representatives to customer and low-income  
12 groups. I look forward to the discussion  
13 today.

14 With that, thank you, and I will  
15 turn it back to Judge Hymes.

16 ALJ HYMES: Thank you, President  
17 Reynolds.

18 Once we begin oral arguments, we'll  
19 proceed through the list of party  
20 representatives. I'll introduce each  
21 speaker. Once you begin to speak, that's  
22 when your time begins, so please state your  
23 name and the name of the party you represent  
24 at the beginning of your remarks.

25 Given our time, I'm going to go  
26 ahead and proceed. Please speak clearly and  
27 slowly for the reporters.

28 First up we have Carla Peterman.

1 Please begin.

2 MS. PETERMAN: Hello, judge. Can you  
3 hear me through my headset?

4 ALJ HYMES: Yes.

5 MS. PETERMAN: Great. All right.

6 ARGUMENT BY MS. PETERMAN

7 Good morning. I am Carla Peterman.  
8 I am representing the Joint Utilities.

9 Thank you, Commissioners and Judge  
10 Hymes, for having us here today and for the  
11 CPUC's work on this proceeding. We agree  
12 with the PD's conclusion that NEM  
13 significantly and negatively impacts  
14 affordability for customers without rooftop  
15 solar and that the NEM cost shift discourages  
16 the adoption of electrification measures.

17 We are also pleased to see the PD's  
18 acknowledgment that NEM customers are not  
19 paying for their use of the grid. Your own  
20 studies found SDG&E residential NEM customers  
21 only pay nine percent of the cost deferred  
22 them.

23 A realtime example of the PD's NEM  
24 design leading to solar customers not  
25 supporting state policies is that NEM  
26 customers will underfund the EV incentive  
27 program the CPUC plans to vote on tomorrow as  
28 NEM customers, including NEM with storage,

1 don't pay fully their fair share of public  
2 purpose program charges and the distribution  
3 component of the bill. Moving forward with a  
4 fixed charge will address that inequity and  
5 the PD should be revised to adopt a fixed  
6 charge immediately.

7           Solar corporations have already  
8 taken positions on the record in the demand  
9 flexibility rulemaking that the fixed charge  
10 should be optional for NEM customers and  
11 lower than the amount required to fully  
12 recover fixed costs.

13           If the Commission decides to defer  
14 the recovery of fixed costs to the demand  
15 flexibility rulemaking, it should clarify in  
16 this PD that rooftop solar customers will be  
17 required to take service on a rate that  
18 includes a fixed charge that fully recovers  
19 the cost of their use of the grid and their  
20 fair share of policy costs.

21           In addition to revising the PD to  
22 include a fixed charge or at minimum  
23 clarifies the application of the fixed  
24 charges to rooftop solar customers, I  
25 highlight three additional suggested changes.

26           First, the decision should be  
27 amended to require NEM1 and 2 customers to go  
28 onto a tariff with no subsidy after the

1 legacy period ends. These customers will  
2 have more than recouped their investment, and  
3 it is unfair to require customers without  
4 rooftop solar to continue to subsidize NEM1  
5 and 2 customers to the tune of billions of  
6 dollars a year well into the 2040s.

7 Second, the Commission should  
8 update the assumptions used in their  
9 calculation of the payback period and the  
10 export adder. The system size used for the  
11 calculation is about half the size of average  
12 installations that we see today, and the  
13 selected payback metric ignores rate  
14 increases.

15 Your own modeling shows nine years  
16 payback will in reality be a six-and-a-half  
17 year payback. Updating these assumptions  
18 will be consistent with what we are seeing  
19 today and will reduce or eliminate the need  
20 for an adder for higher income customers.

21 Third, the decision should be  
22 revised to ensure that the rooftop solar  
23 subsidy is transparent going forward.  
24 Specifically, the decision should require the  
25 utilities to report on the size of the NEM  
26 subsidy annually using the methodology used  
27 by the Commission in this decision. This  
28 information should be shared with customers

1 and policy makers. Customers deserve to  
2 truly understand what is happening here.

3 The clock is ticking for reform.  
4 By the time we transition to the new tariff,  
5 the total NEM cost shift will likely exceed  
6 \$5 billion. It was 3 billion when you  
7 started this proceeding. Let's not delay.  
8 Thank you for your time.

9 ALJ HYMES: Thank you.

10 Next up, we have Susan Tierney.

11 MS. TIERNEY: Good morning. Can you  
12 hear me?

13 ALJ HYMES: Yes. Please proceed.

14 ARGUMENT BY MS. TIERNEY

15 I am Sue Tierney from Analysis  
16 Group speaking on behalf of the Joint  
17 Utilities.

18 Thank you for holding this  
19 opportunity to speak today. Like  
20 Dr. Peterman, I know what it's like to sit in  
21 your shoes. In Massachusetts I was a utility  
22 Commissioner and an environmental cabinet  
23 officer. I was Assistant Secretary for  
24 Policy at the U.S. Department of Energy. I  
25 chair NREL's External Advisory Council, and I  
26 have worked for decades as a consultant  
27 around the country, a board member of many  
28 NGOs and on National Academy Studies,

1 focusing on the transition to a more  
2 affordable, resilient, clean energy economy.

3 I know that California's 20 years  
4 of net metering have substantially  
5 contributed to the state's leadership in  
6 distributed energy. I congratulate you on  
7 the significant work reflected in this  
8 proceeding, and I want to make three points.

9 First, the extensive record in this  
10 docket and the PD findings recognize that it  
11 is time for a major change. The context for  
12 the Commission's decision has recently  
13 changed as well. In the past six months,  
14 California's legislature and congress have  
15 provided billions of dollars in financial  
16 incentives for consumers to adopt rooftop  
17 solar and storage.

18 The PD has rightly found that the  
19 magnitude and severity of the cost shift  
20 requires immediate action by the Commission  
21 and without changes, the financial burden of  
22 NEM is not sustainable and falls  
23 disproportionately on low-income consumers.

24 Second, while making that finding,  
25 this PD puts in place a perpetual cost shift  
26 when it should be putting in place a plan to  
27 sunset it. The estimated 2.5 billion per  
28 year of cost shift created when today's

1 consumers transition to the net billing  
2 tariff will only grow over time.

3 The PD addresses this cost shift  
4 but it doesn't go far enough. The PD adopts  
5 a very long glide path at a time when  
6 immediate action is needed.

7 I encourage the Commission to lean  
8 on the expanded federal and state subsidies  
9 to support solar adoption, rather than  
10 further burdening electricity consumers.  
11 Doing that puts -- putting a burden on  
12 electricity consumers continues negative  
13 price pressure on electricity rates, which  
14 will make it harder for electrification goals  
15 to be accomplished.

16 Finally, this decision should give  
17 clear direction and recognize how the Demand  
18 Flexibility OIR will address the remaining  
19 cost shift. Although the PD points to that  
20 OIR and the need for a fixed charge to reduce  
21 the NEM subsidy, it is important to give that  
22 other proceeding stronger direction to ensure  
23 the intent of this PD with all of its record  
24 and that this -- these goals have been  
25 accomplished.

26 I encourage the Commission to take  
27 note of the recent decision of regulators in  
28 Hawaii to put in place a three-part



1 electricity rate for all residential  
2 consumers, one that includes a fixed charge,  
3 a capacity charge tied to a customer's own  
4 electricity demand, and a time-of-use rate  
5 with a 3-to-1 difference between on- and  
6 off-peak rates.

7 Many other states around the  
8 country also recognize the need for reform.  
9 Thank you so much for this opportunity. ]

10 ALJ HYMES: Thank you. Next up we have  
11 Claire Broome.

12 ARGUMENT BY MS. BROOME

13 Good morning, your Honor, Commissioners  
14 and colleagues. I'm Dr. Claire Broome  
15 representing 350 Bay Area. We advocate for  
16 the environment, environmental justice and  
17 ratepayers with a reach of 22,000 residents.

18 In the past five years, over half of  
19 California's solar PV has been installed on  
20 the distribution grid, one-third on  
21 residential rooftops. Compensating local  
22 solar appropriately is critical to meet our  
23 states's ambitious climate goals consistent  
24 with Energy Commission and CARB planning.

25 The new PD sets up a false dichotomy  
26 between the IOU definition of equity and the  
27 legal mandate to grow solar sustainably.  
28 Real equity starts with addressing the cost

1 of energy itself. As the PD notes,  
2 California's high electricity rates are  
3 driven by increasing costs of transmission,  
4 distribution and wildfire issues. These  
5 costs are outside of scope, but sustaining  
6 solar is squarely within this proceeding, and  
7 solar plus storage can contain costs. Energy  
8 efficiency and rooftop solar in 2017 saved  
9 California ratepayers over 9 billion dollars  
10 for avoided transmission capital profits and  
11 maintenance costs. A model optimizing solar  
12 and storage on the distribution grid saves  
13 California 120 billion dollars by 2050 and  
14 decreases electricity rates. Low-income  
15 households spend a higher proportion of  
16 income on energy costs. So decreasing rates  
17 is a direct equity benefit. Real equity is  
18 best served by increasing solar and storage  
19 for all especially low-income households.

20           Whatever the decision, it is  
21 essential that a new tariff be monitored from  
22 the outset to keep customer solar  
23 installations on track to meet statewide  
24 planning. The proposed annual decreases in  
25 export compensation should not occur unless  
26 solar installations are growing sustainably.

27           Three to five years is way too long  
28 to wait to identify an excessive drop in

1 installations. I'll close with the guidance  
2 we learned early in medical training: First,  
3 do no harm.

4 Thank you very much.

5 ALJ HYMES: Thank you.

6 Next up we have Ann Trowbridge.

7 ARGUMENT BY MS. TROWBRIDGE

8 Thank you, your Honor. Good morning,  
9 Commissioners. I'm Ann Trowbridge  
10 representing the Agricultural Energy  
11 Consumers Association or AECA.

12 AECA appreciates the effort that has  
13 been made to consider a wide range of  
14 viewpoints in developing a successful NEM  
15 program. NEM projects can play a key role in  
16 helping California meet its clean energy  
17 goals but only through a properly designed  
18 NEM program that encourages customer  
19 participation.

20 AECA supports the determination in  
21 the proposed decision, or PD, to maintain NEM  
22 1 and 2 intact. Customers should be able to  
23 rely on the stability of the NEM structure in  
24 place when they decided to invest in solar  
25 generation.

26 AECA has significant concerns,  
27 however, regarding the reversal in treatment  
28 of nonresidential customers. The December

1 2021 PD would have adopted a successor NEM  
2 program for nonresidential customers that was  
3 largely the same as the current NEM 2.0  
4 program. That result is consistent with the  
5 record in this proceeding.

6 The new PD would apply the new NEM  
7 program to both nonresidential and  
8 residential customers. The record does not  
9 support this result.

10 The PD correctly recognizes that the  
11 Lookback Study finds that the nonresidential  
12 customer segments of the NEM 2.0 tariff  
13 generally pass the TRC test and pay rates  
14 that fully covered their cost of services.  
15 Nonresidential NEM customers are also  
16 cost-effective under the PCT test.

17 Even though the PD says that it is  
18 not striving for perfection in one test but  
19 rather a balance of the value and tradeoffs  
20 between the tests, it seems unfortunately to  
21 disregard that statement by placing  
22 substantially more or possibly total emphasis  
23 on the RIM test's nonresidential results with  
24 minimal explanation to conclude that  
25 nonresidential customers under NEM 2.0 are  
26 not cost-effective.

27 This means that the new proposed  
28 decision will discourage agricultural

1 customers who until now have actively  
2 invested in NEM systems from further  
3 participation at a time when all  
4 cost-effective clean energy resources should  
5 be encouraged.

6 AECA respectfully requests, based on  
7 the records in this proceeding, that the  
8 Commission adopt a successor NEM program for  
9 nonresidential RIM consumers that is largely  
10 unchanged from the current program.

11 Thank you. And we will be providing  
12 additional written comment.

13 ALJ HYMES: Thank you.

14 Next up we have Andrew Gong.

15 MR. GONG: Thank you, your Honor. Can  
16 you hear me --

17 ALJ HYMES: Yes, please proceed.

18 ARGUMENT BY MR. GONG

19 Okay. Great. This is Andrew Gong from  
20 Aurora Solar. Aurora Solar is a software  
21 company that provides tools that allow solar  
22 installers to design solar and storage  
23 systems, calculate bill savings and determine  
24 customers' financial outcomes.

25 Our interest in this proceeding,  
26 therefore, is to provide insight and feedback  
27 from a modeling perspective, whether the  
28 assumptions used in the models match up with

1 industry data and if what's being required  
2 can be done.

3 Starting with the  
4 avoided-cost-calculator-based hourly export  
5 rate, to date, nearly all of the utilities  
6 have moved off of standard net metering, have  
7 either tied the export rate to the retail  
8 rates either through using a set reduction, a  
9 percentage cut or simply a flat export rate.  
10 These all have a fairly similar  
11 straightforward to model system, and these  
12 are also being used to explain to a  
13 prospective solar customer.

14 However, we are worried that  
15 explaining the proposed net billing tariff's  
16 576 different hourly export rates, which will  
17 change every year, will take much longer than  
18 this 2-minute-and-30-second oral argument.  
19 While we can model this in our software if  
20 machine-readable export rate data is made  
21 available, we recommend a time-of-use export  
22 rate that follows the ACC instead of these  
23 hourly differential rates because difference  
24 in bill savings will be small. It's going to  
25 be time consuming to implement this new  
26 feature, and it will be confusing to the end  
27 customer.

28 In addition, owners of battery

1 systems are going to have a difficult time  
2 reprogramming this system to follow the new  
3 576 values every time an update takes place.

4           Next, on the no netting or  
5 instantaneous netting, the hourly or  
6 15-minute used -- netting system used in NEM  
7 2 is a little bit easier to model. It's  
8 considerably more predictable and manageable  
9 both for prospective system owners and owners  
10 of existing solar plus storage systems. It  
11 doesn't make a significant difference in  
12 billing and will reduce the amount of  
13 re-implementation that solar installers have  
14 to do if we were to stay with hourly or  
15 15-minute netting.

16           Now, if the Commission were to go  
17 with instantaneous netting, I'd like to note  
18 that the adjustment factor proposed in the PD  
19 is itself an average with a large standard  
20 deviation carrying its own uncertainty. We  
21 would prefer to continue to model bill  
22 savings with hourly netting, as supported by  
23 our testimony, and simply include language in  
24 the standardized bill document that explains  
25 the nuances of the bill savings estimate.  
26 This saves everyone a lot of effort and  
27 confusion.

28           Finally, turning to the CPUC's net

1 billing tariff's spreadsheet, there is some  
2 incorrect assumptions about system prices  
3 given recent inflation and the fact that  
4 large -- sorry -- small systems tend to have  
5 a much higher cost per watt.

6 Thank you.

7 ALJ HYMES: Thank you.

8 Next up is Kevin Johnson. Please  
9 proceed.

10 MR. JOHNSTON: Thank you, your Honor.  
11 Can you hear me okay?

12 ALJ HYMES: Yes.

13 ARGUMENT BY MR. JOHNSTON

14 Okay. Good morning. Thank you for the  
15 opportunity to speak today. My name is Kevin  
16 Johnston. I'm here on behalf of the  
17 California Farm Bureau Federation, the  
18 largest organization representing farmers and  
19 ranchers in California.

20 We are continuing to review the new  
21 proposed decision but would like to discuss  
22 two main points. One is the treatment of  
23 nonresidential NEM 1.0 and 2.0 customers and  
24 two, the analysis of nonresidential customer  
25 cost-effectiveness.

26 First, we are pleased to see the new  
27 PD has made changes and will leave NEM 1.0  
28 and 2.0 customers unharmed. This change



1 recognizes the significant investments Farm  
2 Bureau members have made in choosing to  
3 participate in the NEM program and honors the  
4 commitment the Commission made to those  
5 customers in prior NEM decisions.

6           Unfortunately, our second point is  
7 similar to our concerns with the original  
8 proposed decision. The proceeding in both  
9 proposed decisions rely on predominantly  
10 residential analysis and almost exclusively  
11 residential proposals to make conclusions and  
12 decisions for nonresidential customers. The  
13 PD claims each test should be looked at  
14 holistically and no single test a trump card,  
15 but the nonresidential RIM score becomes the  
16 single justification for nonresidential  
17 changes despite positive results in the other  
18 tests and overwhelming data regarding  
19 nonresidential payment for cost of services.

20           The argument hinges on the  
21 unsubstantiated fear that a change in demand  
22 charges or high fixed charges in another  
23 proceeding could lead to the reductions in  
24 the nonresidential payments for cost of  
25 service, which I'll add has always been over  
26 a hundred percent under nonresidential NEM  
27 1.0 and 2.0 customers. I simply ask the  
28 Commission whether they have received any

1     indication from the utilities that demand  
2     charges will be done away with and who makes  
3     the final determination on whether or not new  
4     rate structures go into place. Frankly, it  
5     is a simplistic justification to lump all  
6     customers under one tariff.

7             The PD is also severely lacking in  
8     its analysis of the NEMA program. As we have  
9     previously cautioned, NEMA is not NEM.  
10    Customers are treated differently, and the  
11    NEMA subtariff was designed with the basis of  
12    covering its cost of services in mind and is  
13    deserving of a thoughtful, individual  
14    analysis before changes are made.

15            As we have previously stated, why  
16    not just leave nonresidential alone for now?  
17    We're not opposed to tweaks, but to subject  
18    nonresidential customers to changes based on  
19    residential results lacks the nuance and care  
20    that should be expected in such an important  
21    decision. The record supports not making  
22    changes to nonresidential customers, and the  
23    second track, a different proceeding, could  
24    take a more careful and nuanced approach  
25    nonresidential customers deserve.

26            Thank you.

27            ALJ HYMES: Thank you.

28            Next up we have Brad Heavner.

1 ARGUMENT BY MR. HEAVNER

2 Thank you. Brad Heavner with the  
3 California Solar and Storage Association.

4 We are certainly glad that the PD  
5 has come down to earth. For too long we've  
6 been debating solar-specific fees which are  
7 not components of net metering and were not  
8 based on cost causation. The PD does not  
9 fully characterize our legal arguments on  
10 solar fees, but we can let that go. The PD  
11 is now focused on the value of exported  
12 energy, which should have been the whole  
13 conversation all along.

14 Commissioners, I hope you respect  
15 the fact that the solar industry is onboard  
16 with going to a set of export values far  
17 lower than they are now, nearly doing away  
18 with daytime export credits. It is not easy  
19 for us to support that, but we do. However,  
20 making that change too quickly will do too  
21 much damage.

22 The PD is still built on a fictional  
23 average cost of solar and storage. It  
24 basically says solar in California will not  
25 be viable unless providers can drop their  
26 prices overnight. That would not cause  
27 prices to go down. It would cause them to go  
28 up. If you want prices to go down, keep

1 workers busy so they are efficient and  
2 competitive. If there are firings and  
3 business closures and disruption, we will  
4 lose efficiency and lose highly trained  
5 people.

6 Excluding medium and large  
7 commercial customers and agricultural  
8 customers from the ACC plus adders is not  
9 based on factual information. The E3 model  
10 that the PD is based on does not include  
11 analysis of any customers with demand  
12 charges. This is a really stunning gap. The  
13 analysis is only relevant to small commercial  
14 customers who are more like residential  
15 customers than medium commercial. You can't  
16 conclude that the commercial market won't be  
17 devastated in the absence of any analysis and  
18 without reference to information that is on  
19 the record on large commercial. At the very  
20 least, the adders should apply to commercial  
21 projects.

22 For low-income customers, we  
23 absolutely support the equity fund, but that  
24 will likely only fund 15- to 30,000 systems.  
25 We need viable adoption for moderate-income  
26 customers without an outside cash incentive.  
27 For that, most importantly, the adder must be  
28 higher. We all know that interest rates have

1     soared recently, and that makes it harder for  
2     low- and moderate-income customers who rely  
3     on financing. Please keep this in mind both  
4     for CARE customers and for low- and  
5     moderate-income customers who are above that  
6     threshold. A glidepath based on a nine-year  
7     simple payback is not sufficient for  
8     customers to achieve savings that exceed loan  
9     payments. A glidepath based on a seven-year  
10    simple payback would create savings from a  
11    loan.

12                 Thank you very much.

13                 ALJ HYMES: Thank you.

14                 Next up we have Nancy Rader.

15                 ARGUMENT BY MS. RADER

16                 Good morning. This is Nancy Rader of  
17     the California Wind Energy Association.

18                 Over the past few years, we've  
19     experienced the challenge of maintaining  
20     reliability while striving to meet our clean  
21     energy targets. And the more clean energy  
22     capacity and transmission we have to build,  
23     the harder it will be to meet those twin  
24     goals.

25                 Rooftop solar advocates often  
26     suggest that high levels of residential  
27     rooftop solar will ease that challenge and  
28     that, therefore, we must continue high

1 rooftop solar growth rates despite the high  
2 cost. But that argument is not supported by  
3 any evidence in this proceeding. In fact,  
4 CalWEA provided evidence to the contrary. We  
5 show that adding too much rooftop solar  
6 actually increases the need for utility sales  
7 capacity and related transmission and  
8 therefore increases our challenges. That  
9 seems counterintuitive. So I will explain.

10 CalWEA simply changed two  
11 assumptions in the Commission's IRP model  
12 that was used to develop the resource  
13 portfolio in the SB 100 Joint Agency Report.  
14 We reduced by half the 31 gigawatts of new  
15 rooftop solar that was hardwired into the  
16 model, and we held the level of greenhouse  
17 gasses constant. Then we let the model run.  
18 Unsurprisingly, the results show that  
19 rooftop -- reducing rooftop solar by half  
20 would save at least a billion dollars each  
21 year. But surprisingly, the results also  
22 show that we would need less utility-scale  
23 capacity because we rely more on geothermal  
24 and wind energy and less on rooftop and  
25 utility-scale solar. Geothermal and wind  
26 have higher capacity factors, so less  
27 capacity is needed overall.

28 In addition, the model showed we

1 would reduce the need for storage by 7  
2 gigawatts since we would have less solar to  
3 manage. Less capacity means lower associated  
4 land-use requirements and transmission. This  
5 evidence was presented in CalWEA's testimony  
6 and was not refuted.

7 A 5 billion dollar annual cost shift  
8 that benefits a subset of customers is not  
9 equitable or affordable. It's also likely to  
10 increase the need for utility-scale resources  
11 and thereby increase our twin challenges of  
12 maintaining reliability while reducing carbon  
13 emissions.

14 So please don't be persuaded by  
15 claims that the modest proposed reduction in  
16 compensation for rooftop solar is bad for  
17 California's climate goals. In fact, the  
18 opposite is true.

19 While the PD is an improvement over  
20 current policies, the Commission should  
21 further reduce the cost shift to promote rate  
22 affordability and achievement of our clean  
23 energy goals.

24 Thank you.

25 ALJ HYMES: Thank you.

26 Michael Boyd, please.

27 (No response.)

28 ALJ HYMES: Mr. Boyd?

1 (No response.)

2 ALJ HYMES: May I ask if -- let's go  
3 off the record.

4 (Off the record.)

5 ALJ HYMES: Let's go back on the  
6 record.

7 Roger Lin, please.

8 ARGUMENT BY MR. LIN

9 Thank you, your Honor. Roger Lin with  
10 Center for Biological Diversity.

11 I want to talk about equity and  
12 specifically four elements from the ESJ  
13 Action Plan. First, the Commission should  
14 use the plan's definition of low-income.

15 Working-class Californians represent  
16 the largest demographic that installed  
17 rooftop solar in 2021. To ensure -- to  
18 ensure the sustainable growth of the program,  
19 we have to look forward, and the ESJ  
20 definition of low-income can target this  
21 segment of the population and get us closer  
22 to our climate goals.

23 It is critical to design a NEM  
24 program for the grid of the future with  
25 intentional and targeted policies that are  
26 not locked into findings of the past.

27 Second, non-energy benefits.  
28 Including land-use impacts, local air quality



1 and public health, avoided fossil fuel  
2 infrastructure and reliability or resiliency.  
3 The microgrid proceeding is developing a  
4 value for resiliency, and the CEC has already  
5 begun work on non-energy benefits for the  
6 IEPR and the SB 100 Joint Agency Report.  
7 Contrary to the PD, the burden should not be  
8 on the parties to provide evidence of these  
9 values. The ESJ Action Plan has identified  
10 the need to consider non-energy benefits,  
11 which is also a principal recommendation from  
12 the Barriers Study and the charter of the DAC  
13 Advisory Group. This work is long overdue.

14 The ACC and cost-effectiveness tests  
15 cannot adequately consider these benefits.  
16 The record includes substantial evidence of  
17 the many DAC and ESJ benefits missing from  
18 the cost-shift analysis. The En Banc  
19 Affordability Papers even acknowledged the  
20 need for further work to determine the extent  
21 or even existence of the cost shift for BTM  
22 resources.

23 Third, barriers. The prior equity  
24 fund implemented in collaboration with  
25 environmental justice stakeholders could  
26 holistically address barriers to greater  
27 clean energy deployment but legislative  
28 direction for the SGIP funds cannot.

1 Related, one significant barrier is the  
2 difficulty in understanding program  
3 requirements, especially a lack of certainty  
4 in regard to bill savings which the PD  
5 presents.

6 And a final point: Procedural  
7 justice. The PD defers full consideration of  
8 several issues to other proceedings or  
9 processes, making it next to impossible for  
10 EJ advocates to adequately participate. We  
11 should not determine new program rules and  
12 requirements without all of the facts at hand  
13 and informed by the proper advocates. The  
14 Commission must ensure that those voices are  
15 adequately represented and not experiment  
16 with apparent short-term course correction  
17 safeguards that can have long-term  
18 implications for the sustained growth of  
19 rooftop solar, especially in DAC and other  
20 ESJ communities.

21 Thank you for your time. ]

22 ALJ HYMES: Thank you. Next up, we  
23 have Ben Schwartz, please.

24 ARGUMENT BY MR. SCHWARTZ

25 Good morning and thank you for the  
26 opportunity to speak today.

27 My name is Ben Schwartz, policy  
28 manager for the Clean Coalition. While the

1 Clean Coalition appreciates that the grid  
2 participation charge and any form of  
3 transmission access charges have been removed  
4 from the proposed decision, we also believe  
5 that there should be no fixed fees entrenched  
6 in rates that NEM customers will be required  
7 to transition to. Specific fees for  
8 customers adopting -- adopting  
9 electrification measures are punitive for  
10 ratepayers helping California on a pathway to  
11 achieve climate goals. Instead, there should  
12 be greater time-varying rates to promote  
13 usage during non-peak times.

14 The PD still sends a negative price  
15 signal to consumers at a time when the pace  
16 of solar adoption needs to increase to  
17 achieve electrification goals. The proposed  
18 decision is incongruous with the high cost of  
19 living in California, inflation, skyrocketing  
20 electric rates, supply chain issues, and does  
21 not effectively incentivize greater  
22 deployment in key communities. As is, it  
23 will not lead to sustainable growth of  
24 renewable resources.

25 The first concern is that basing the  
26 successor tariff on a flawed lookback study  
27 is bad policy. Fixing the cost shifts has  
28 become -- become one of the essential

1 concerns of the net-billing tariff despite 16  
2 state-level studies and a national study of  
3 20 - of 43 net metering policies, which found  
4 no cost shift particularly when solar  
5 penetration is under 10 percent.

6 The cost shift argument overstates  
7 NEM costs such as including a loss of sales  
8 to the utilities as a cost, while ignoring  
9 NEM benefits, such as societal benefits or  
10 non-energy benefits. Value from NEM 1 and  
11 NEM 2 customers pushing back the peak period  
12 and value from fostering electrification.

13 Second, using an unfinished avoided  
14 cost calculator will result in lower rates  
15 being locked in for NEM customers. Locking  
16 in avoided cost export rates is a mistake  
17 considering that the avoided cost calculator  
18 is an unfinished document. For example, the  
19 2022, ACC approves a specific avoided  
20 transmission value for PG&E but waits to do  
21 so for SCE and SDG&E until the methodology is  
22 finished. Moreover, unspecified avoided  
23 transmission is also not yet valued in the  
24 calculator meaning that over time it will  
25 change and include more values.

26 This proposed decision specifically  
27 disincentivizes deployments in key  
28 communities rather than incentivizing them at

1 the --

2 (Timer notification.)

3 MR. SCHWARTZ: -- the rate that  
4 California...

5 ALJ HYMES: Thank you.

6 Next is Rachael Koss.

7 ARGUMENT BY MS. KOSS

8 Rachael Koss for the Coalition of  
9 California Utility Employees. I have three  
10 points.

11 First, after the original PD, the  
12 solar industry called the participation  
13 charge a solar tax. There is no solar tax  
14 levied on solar customers. Not from the  
15 original PD. Not from this PD. The fact is  
16 people without solar pay a hidden tax to prop  
17 up the rooftop solar industry.

18 In 2022, that tax was \$4.6 billion,  
19 and it increases by \$1 billion every year  
20 under the current system. The PD does  
21 nothing to keep the tax imposed by current  
22 solar customers from growing as rates  
23 increase.

24 The tax from new solar customers  
25 will be a bit less under this PD than under  
26 NEM 2.0, but not much. The tax caused by new  
27 solar customers come from, one, eight or nine  
28 cents per kilowatt-hour export rate, which is

1 the ACC plus a subsidy, which is almost  
2 triple the three cents we pay for large scale  
3 solar plus storage, but the rooftop solar  
4 industry complains it's not enough. Two, the  
5 fact that customers will mostly self-consume  
6 their generation, especially if they have  
7 batteries, which means that they'll be  
8 compensated at the full retail great; and  
9 three, because the PD eliminates the  
10 participation charge, rooftop solar customers  
11 pay nothing for the grid that they use every  
12 second of every day. There is still a  
13 gigantic cost shift under this PD.

14 A solar customer's entire investment  
15 will be paid back in less than 10 years. The  
16 next 10-plus years is just free money from  
17 non-solar customers. This is a phenomenally  
18 generous PD, and they complain it's not  
19 enough.

20 This PD continues a huge handout to  
21 an insatiable industry. Do not let them tell  
22 you this is unfair or deprives people of  
23 solar. Second, the industry's framing of  
24 this as good solar versus bad monopoly  
25 utilities is totally untrue. You know  
26 utilities don't make a single penny based on  
27 the amount of commodity they sell. Their  
28 revenue requirement doesn't get bigger or

1 smaller depending on how much rooftop solar  
2 installations they are. The only profits at  
3 stake are the profits of the rooftop solar  
4 industry.

5 Finally, the rooftop solar industry  
6 cries this will cost thousands of jobs. This  
7 isn't going to shrink the solar industry.  
8 That's all in the record, and even if it did,  
9 those jobs are low paid with little benefits  
10 and no career future; and they take away from  
11 good union jobs installing low cost,  
12 large-scale solar and storage. We can build  
13 10 times as much capacity for the same price  
14 as large-scale solar and storage.

15 The bottom line is rooftop solar is  
16 expensive with bad jobs, and large-scale  
17 solar is cheap with good jobs.

18 Thank you.

19 ALJ HYMES: Thank you. Next, we have  
20 Raghu Belur.

21 ARGUMENT BY MR. BELUR

22 Good morning. Can you hear me  
23 clearly?

24 ALJ HYMES: Yes. Please proceed.

25 MR. BELUR: Great. My name is Raghu  
26 Belur. I am the co-founder and chief  
27 products officer for Enphase Energy. We are  
28 an S&P company and been recently selected to

1 be part of the NASDAQ-100.

2 I started Enphase in California in  
3 2006, and I have had a front row seat to the  
4 rapid evolution of our industry. We need  
5 policy that simultaneously benefits  
6 consumers, power providers and industry,  
7 which the CPUC's push towards whole-home  
8 electrification aims to achieve. I would  
9 like to thank the CPUC, Governor Newsom's  
10 office and our industry for working  
11 collaborately -- collaboratively to achieve  
12 this -- to try and achieve this goal.

13 To continue to evolve, we must  
14 transition to solar plus storage in a manner  
15 is not disruptive. The revised PD has been a  
16 substantial step in the right direction.  
17 Eliminating the GPC, restoring NEM -- NEM  
18 contracts and increasing the size of solar.  
19 That is all great; however, I am concerned by  
20 the lack of transition period.

21 We can seriously impede the goals of  
22 the PD if we cut solar deployment so abruptly  
23 that it slows down the adoption of storage,  
24 EVs and heat-pumps. That would be a big  
25 loss.

26 I also caution against an abrupt  
27 transition while state policy is still in  
28 flux. The CPUC has put the right pieces in



1 place with new SGIP funding, regulatory  
2 proceedings to expand demand flexibility and  
3 forge a high-DER future, and resiliency  
4 programs to deploy these systems to benefit  
5 the grid. However, there is much more work  
6 to be done. SGIP funding will not be  
7 available for months, and we don't know what  
8 the requirements will be, the demand  
9 flexibility and the high-DER future  
10 proceedings have only been recently launched  
11 and policy frameworks haven't been  
12 established, and the ELRP has only one season  
13 under its belt.

14 While we must use NEM 3 to spur on a  
15 storage transition, we should do so on a  
16 timeline commensurate with the state's  
17 policies designed to support it. All these  
18 pieces need to work in concert to create a  
19 sustainable DER market. Therefore, the CPUC  
20 should use its ACC plus to create a brief  
21 transition period. The CPUC estimated last  
22 year that the current simple payback is  
23 4.1 years, so immediately jumping to a 9-year  
24 payback is too jarring for the industry.  
25 Rather, it should set its year one adder to  
26 achieve a 7-year payback and year two adder  
27 to achieve an 8-year payback before  
28 transitioning to its 9-year payback adder.

1 This could stabilize the solar market in the  
2 near term while providing the storage market  
3 and state policy more time to mature.

4 The rest of the country follows  
5 California's lead on clear energy, and we  
6 collectively bear those responsibilities.

7 Enphase is committed to carrying on  
8 our evolution to help consumers, power  
9 providers and our industry combat climate  
10 change and create a more resilient grid.

11 Thank you.

12 ALJ HYMES: Thank you.

13 Next up is Steve Sherr, and I just want  
14 to remind everyone to please speak slowly for  
15 the reporters. Thank you.

16 Mr. Sherr?

17 ARGUMENT BY MR. SHERR

18 Good morning, Judge Hymes,  
19 Commissioners and colleagues. We appreciate  
20 and understand the focus of this proceeding  
21 on solar and storage -- and I should say I am  
22 Steven Sherr from Foundation Windpower.

23 Our -- our small company develops,  
24 owns and operates wind energy system sized  
25 between one and six megawatts located behind  
26 the meter at medium to large commercial, and  
27 in industrial and agricultural consumers  
28 across the state of California.

1           At the outset, it is important to  
2     emphasize that we support and wish to amplify  
3     everything that has been said today by the  
4     Agricultural Energy Consumers Association and  
5     the California Farm Bureau Federation who  
6     acknowledge and recognize and hope that the  
7     Commission will see clear to distinguishing  
8     nonresidential customers to residential  
9     customers. In addition to that, though, I  
10    would add that by every measure under the  
11    standard-practice manual, including the  
12    ratepayer impact measure or RIM, wind energy  
13    behind the meter at these consumers is  
14    extremely cost effective. It would be  
15    self-defeating by ever measure of the goals  
16    of this proceeding to do anything to  
17    disincentivize the deployment of wind energy  
18    behind the meter; and why is that?

19           First and foremost, wind energy  
20    produces at precisely the time consumers, the  
21    grid and all of us need energy the most, in  
22    the late afternoon and evening peak periods.

23           Second, these consumers pay  
24    100 percent of their interconnection costs.  
25    Sometimes those are substantial  
26    grid-hardening interconnection costs, and  
27    anything that is sized over one megawatt has  
28    to bear its on freight on interconnection.

1 And, like other commercial consumers, these  
2 wind energy customers also pay demand  
3 charges.

4 Now, we understand that there is a  
5 reluctance to carve out -- I think the word  
6 is from the proposed decision -- particular  
7 technologies. But at the end of the day, the  
8 guiding principle D of this proceeding tells  
9 us that we must consider all technologies  
10 fairly, and AB 327 does not prohibit this  
11 Commission from making a decision that is  
12 tailored to the technologies that are  
13 available us -- available to us today.

14 We will submit written comments  
15 suggesting specific revisions, but we do hope  
16 that the benefits of wind energy in  
17 nonresidential settings is not lost in the  
18 shuffle.

19 Thank you very much.

20 ALJ HYMES: Thank you. Next up is  
21 Stephen Campbell.

22 ARGUMENT BY MR. CAMPBELL

23 Can you hear me okay?

24 ALJ HYMES: Yes. Please proceed.

25 MR. CAMPBELL: Thank you.

26 ALJ Hynes, Commissioners and fellow  
27 attendees. Steve Campbell, GRID  
28 Alternatives.

1 GRID Alternatives envisions a rapid,  
2 equitable transition to a world powered by  
3 renewable energy. My job in this proceeding  
4 is to advocate for policy that enables  
5 environmental and social justice communities  
6 to benefit from the successor tariff. I've  
7 constantly thought about all ratepayers, most  
8 having no idea this proceeding is even  
9 happening; would they want to participate in  
10 and benefit from local, distributed and  
11 resilient clean energy, and my answer was  
12 always a resounding yes.

13 Each time I may have waived in  
14 that determination after listening to honest  
15 and logical points from another stakeholder,  
16 I found overwhelming support for it when I  
17 spoke with internal GRID staff serving  
18 low-income communities across the state; when  
19 I spoke with nonprofit affordable housing  
20 developers, small community-based  
21 organizations, and other low-income advocacy  
22 organizations like the California Low Income  
23 Consumers Coalition. Thankfully, the PD  
24 dispensed of a one-sided equity argument and  
25 noted "that the equity issue cannot be  
26 addressed solely by reducing the cost shift.  
27 Disadvantaged communities should not continue  
28 to be left behind with respect to clean

1 energy options, including electrification and  
2 storage. The successor tariff will address  
3 the equity issue by working to ensure  
4 increased participation by disadvantaged  
5 communities."

6 Right now, we don't believe the PD  
7 is set to increase participation -- excuse  
8 me. To do so, GRID will propose the  
9 following revisions to the PD so a rapid,  
10 equitable transition to renewable energy can  
11 benefit everyone.

12 First, the installed cost of solar  
13 for low-income is demonstrably too low.  
14 Once accurate dollar-to-watt forecast is  
15 used, the ESJ adder would be adjusted up.  
16 This is critical.

17 The Commission should really be  
18 including all members of the ESJ communities,  
19 including households with annual incomes at  
20 or below 80 percent AMI to be eligible for  
21 the sub tariff. Right now, the PD determines  
22 sub tariff eligibility is CARE and FERA  
23 eligible, no more tribes. Obviously, it  
24 needs to include tribes and households with  
25 incomes at or below 80 percent AMI.

26 Third, the AB 209 lower-income  
27 incentive monies does not equal an equity  
28 fund. First, as referenced in the PD, AB 209

1 funding is "subject to future legislative  
2 appropriation." That is a known unknown.  
3 Second, AB 209 is a market transmission  
4 program, and market transmissions programs  
5 were not meant to overcome many other known  
6 barriers. Lastly, to help address this  
7 uncertainty, we recommend holding the ACCs  
8 plus flat --

9 (Timer notification.)

10 MR. CAMPBELL: -- no step downs for all  
11 ESJ customers for five years.

12 ALJ HYMES: Thank you.

13 Next, we have Scott Murtishaw.

14 ARGUMENT BY MR. MURTISHAW

15 Good morning, can you hear me?

16 ALJ HYMES: Yes. Please proceed.

17 MR. MURTISHAW: All right.

18 Good morning, Commissioners. I am  
19 Scott Murtishaw with the Independent Energy  
20 Producers, and I will start with a political  
21 truism: It's way harder to end a subsidy  
22 than to create it. Subsidies are sticky.  
23 They concentrate benefits on the few who then  
24 fight mightily to resist proposed reforms.  
25 And NEM is an enormous cost subsidy  
26 benefiting homeowners who have the means to  
27 install solar and harming those who do not.  
28 The PD does not go far enough to rectify this

1 inequity.

2 Under the PD, every new solar system  
3 installed will make a non-solar customer  
4 substantially worse off. Appendix B of the  
5 PD shows that non-solar customers will  
6 receive only 23 to 37 cents of value for  
7 every dollar they transfer to solar  
8 customers, but solar customers will reap  
9 benefits of up to \$2.50 for every dollar they  
10 invest in their solar system. This is simply  
11 a wealth transfer from non-solar ratepayers  
12 to those with the wherewithal to install  
13 solar. Why is this remotely acceptable?

14 Large-scale renewables are a much  
15 cheaper alternative. The latest RPS annual  
16 report shows that 2021 renewable contracts  
17 cost only 2 cents per kilowatt hour, a lower  
18 cost resource benefiting all customers. The  
19 solar parties estimated the transmission cost  
20 to deliver this electricity at 3 cents per  
21 kilowatt hour. That's an all-in cost of 5  
22 cents, and that is the benchmark that rooftop  
23 solar should meet.

24 The proposed export compensation  
25 rate does bring export compensation closer to  
26 parity with the large-scale renewables, but a  
27 sizeable cost shift remains.

28 When solar generation used onsite



1 provides bill savings greater than utilities'  
2 avoided costs, the difference must be  
3 recouped from other customers to pay for  
4 fixed costs and social programs. This is not  
5 debatable.

6 Under the utilities' EV tariffs,  
7 non-solar customers will effectively pay  
8 solar customers 15 to 55 cents in excess  
9 costs for every kilowatt hour due to the huge  
10 gap between customer savings and avoided  
11 costs. The Commission should reinstate a  
12 grid charge to further reduce this cost  
13 shift.

14 Solar advocates claim that we need  
15 rooftop solar to meet our climate goals. Not  
16 true. Senate Bill 1020, signed this year,  
17 requires utilities and CCAs to be 90 percent  
18 GHG-free by 2035 and 100 percent by 2045.

19 The electricity sector will rapidly  
20 decarbonize over the next decade with or  
21 without rooftop solar, but we can do so at a  
22 far lower cost with a more rational mix of  
23 large-scale and rooftop renewables.

24 Thank you.

25 ALJ HYMES: Thank you. I understand  
26 Mr. Boyd has -- we have corrected those  
27 difficulties.

28 Mr. Boyd?

1 ARGUMENT BY MR. BOYD

2 Yes, can you hear me?

3 ALJ HYMES: Yes.

4 MR. BOYD: Okay. Go ahead?

5 ALJ HYMES: Yes, please proceed.

6 MR. BOYD: Good morning. I am Michael  
7 Boyd, president of Californians for Renewable  
8 Energy, Inc.

9 We feel uncomfortable with the  
10 proposal to use the Commission's avoided cost  
11 calculator instead of full avoided cost under  
12 the Public Utility Regulatory Policies Act,  
13 or P-U-R -- P-U-R-P-A is the acronym, and I  
14 will call it PURPA.

15 We feel uncomfortable with the  
16 proposal to measure our contributions to the  
17 RPS at utility's meter instead of measuring  
18 at the solar inverter's AC output.

19 By measuring at the utility's meter,  
20 this allows the IOU to receive the best  
21 benefits of actual solar being produced for  
22 free. This is what happens when you mix  
23 retail imports with wholesale exports.

24 I am requesting that an alternative  
25 proposed decision be offered up that provides  
26 customer generators compensation for all the  
27 renewable emergency they produce as measured  
28 at the AC output of their inverter connected

1 to their solar panel, and I request  
2 compensation at full avoided cost under the  
3 -- under PURPA.

4 The Western Energy Generation  
5 Information System -- that is acronym  
6 W-R-E-G-I-A or WREGIS -- is part of the  
7 Electric Coordinating Council, which has been  
8 approved by the Federal Energy Regulatory  
9 Commission as the regional entity for the  
10 western interconnection, which promotes bulk  
11 power system reliability and security in the  
12 western interconnection.

13 CARE has a business account with  
14 WREGIS, and my 5.2 kilowatts PV solar system  
15 is a generating unit. My solar power  
16 inverter's AC output is connected to a  
17 revenue-grade meter approved by WREGIS. The  
18 meter was interconnected on July 1st, and  
19 after November 1st, it recorded one  
20 megawatt-hour of solar power was produced.  
21 WREGIS issued me a certificate for one  
22 renewable energy credit or REC. This REC is  
23 tradeable to PG&E.

24 I produced the one megawatt in a  
25 four-month period. If we normalize that one  
26 megawatt-hour to roughly 13,000 megawatts --

27 (Timer notification.)

28 MR. BOYD: -- megawatts of rooftop

1 solar that is interconnected statewide, then  
2 there was two and a half trillion watts of  
3 solar power produced in four months that  
4 wasn't counted towards the state's RPS.  
5 That's 7.5 terawatts annually not being  
6 counted in the RPS, and that is -- is a free  
7 uncompensated benefit to the utilities. ]

8 ALJ HYMES: Mr. Boyd, your time is up.  
9 Thank you.

10 Next is Allie Detrio.

11 MS. DETRIO: Hello. Can you hear me?

12 ALJ HYMES: Yes, please proceed.

13 ARGUMENT BY MS. DETRIO

14 Hello, Commissioners. My name is Allie  
15 Detrio here on behalf of Ivy Energy.

16 Ivy has been advocating for  
17 multifamily solar and maintaining a workable  
18 VNEM tariff for apartments and renters  
19 throughout this proceeding.

20 Ivy is thankful for many of the  
21 changes in this PD, including that the CPUC  
22 has acknowledged that on-site load is being  
23 served by VNEM systems and maintains existing  
24 netting intervals. We request that the final  
25 decision clarify that netting should be  
26 maintained -- should be measured at the  
27 parcel level to facilitate better storage  
28 pairing options in the transition.

1 VNEM was not analyzed in the  
2 Lookback Study, as we noted multiple times in  
3 our testimony. We have concerns that the  
4 analysis and questionable assumptions on VNEM  
5 in Appendix B of the recent PD are not in the  
6 record and inaccurately portray savings and  
7 payback periods, which is further compounded  
8 with uncertainty with future labor costs.

9 The questionable analysis results in  
10 the PD not extending the ACC Plus adder, or  
11 glide path, to multifamily VNEM systems.  
12 VNEM should also have a glide path.

13 There is a lack of acknowledgment  
14 within the PD about the equity benefits of  
15 maintaining a strong VNEM for renters who do  
16 not own their homes. Ivy has provided data  
17 and studies on the record about renter  
18 demographics and statistics to show how  
19 reaching non-homeowner renters would achieve  
20 equity in this program.

21 Renters are overwhelmingly  
22 low-income people of color and they are the  
23 nonparticipating ratepayers in NEM. We  
24 should be expanding, not constricting, VNEM.  
25 As our testimony states, based on the number  
26 of customers and meters served by a single  
27 service delivery point with VNEM, it's  
28 entirely possible that multifamily buildings

1 are paying more than their cost of service.  
2 None of that was analyzed in the Lookback  
3 Study or throughout this proceeding.

4 Ivy still believes that VNEM 2.0  
5 should be maintained like the low-income VNEM  
6 SOMAH tariff until multifamily buildings can  
7 be analyzed as their own customer class as an  
8 intentional policy decision to promote equity  
9 and environmental justice through improved  
10 renter access to clean energy.

11 If the PUC does not maintain VNEM  
12 for renters, the Commission should make the  
13 following changes for the final decision:

14 Remove the assumptions on VNEM in  
15 Appendix B as they were not analyzed or  
16 discussed on the record.

17 The VNEM successor tariff should be  
18 placed -- should be based on ACC Plus values  
19 for exports in line with the net billing  
20 tariff.

21 Multifamily apartments under VNEM  
22 should get the glide path adder to facilitate  
23 a smooth transition to successor.

24 The PD should clarify that netting  
25 in a VNEM will be measured at the parcel  
26 level --

27 (Timer notification.)

28 MS. DETRIO: Ivy's data on equity and

1 renter demographics should be acknowledged on  
2 the record. Renters are overwhelmingly  
3 low-income communities of color, and these  
4 are the disadvantaged communities that the  
5 Commission should be trying to help in the  
6 final decision with VNEM. Thank you very  
7 much.

8 ALJ HYMES: Thank you.

9 Next we have me Mohit Chhabra.

10 MR. CHHABRA: Good morning. Can you  
11 hear me?

12 ALJ HYMES: Yes. Please proceed.

13 ARGUMENT BY MR. CHHABRA

14 I, Mohit Chhabra, represent NRDC, an  
15 international environmental organization that  
16 develops and promotes policies to decarbonize  
17 our economy affordably, equitably, and in an  
18 environmentally sound manner. Rooftop solar  
19 is critical to this.

20 NRDC's work in this proceeding  
21 reflects California's unique situation. We  
22 want to ensure that distributed clean energy  
23 grows sustainably, mitigate costs of NEM for  
24 those without solar, and make distributed  
25 clean energy more accessible to lower income  
26 customers.

27 Since 2010, PV production costs have  
28 plummeted, retail rates at which California's

1 solar customers are compensated have  
2 skyrocketed. It is this situation that's  
3 helped build a vibrant rooftop solar  
4 industry. California now has over a million  
5 solar roofs. Rooftop and supply side solar  
6 have driven down wholesale electricity;  
7 prices. This is a success story.

8           However, retail rates have far  
9 outgrown the value of clean distributed  
10 energy. NEM's annual costs are now \$4  
11 billion more than its benefits even after  
12 accounting for the clean and distributed  
13 value of solar. This raises rates for all.  
14 High rates and bills hamper our  
15 decarbonization goals by making it harder for  
16 Californians to adopt clean electric cars and  
17 appliances. They also further burden the  
18 most vulnerable.

19           NEM needs to evolve to align with  
20 grid needs, policy goals, and grow  
21 sustainably for all.

22           This PD recognizes that NEM sits on  
23 the shoulders of retail rate design. It does  
24 not institute specific charges to ensure that  
25 solar customers contribute their share of  
26 costs of the grid and policy mandates funded  
27 through electric bills. It updates the  
28 export compensation to align with the value



1 of distributed clean energy. This is a good  
2 step toward addressing NEM's affordability  
3 concerns. The PD also recommends modernizing  
4 electric rates for all customers. This is  
5 the appropriate long-term solution.

6 The proposed tariff encourages solar  
7 adoption and use in line with our needs and  
8 policy goals. It makes solar more accessible  
9 to lower income households by paying more for  
10 exports retaining the equity fund and  
11 concessions for income-qualified housing.

12 On balance, NRDC supports this  
13 revised proposed decision. We appreciate the  
14 Commission's efforts to achieve a balanced  
15 and effective solution. Thank you.

16 ALJ HYMES: Thank you.

17 Next up is Ellison Folk.

18 Ms. Folk, are you -- yes.

19 ARGUMENT BY MS. FOLK

20 Good morning. Ellison Folk on  
21 behalf of Protect Our Communities  
22 Association.

23 I'd like to start by acknowledging  
24 that the revised proposed decision is better,  
25 but comparison to the prior decision is not  
26 the relevant legal standard. Rather, the  
27 Commission must ensure that the successor  
28 tariff complies with state law.

1           The Public Utilities Code directs  
2     the Commission to ensure that any NEM tariff  
3     is based on the cost and benefit for  
4     behind-the-meter resources, but the proposed  
5     decision underestimates both of these. It  
6     underestimates the benefits and it overstates  
7     their costs.

8           First, when looking at cost, the  
9     decision is driven by the false narrative  
10    that behind-the-meter resources cause a  
11    massive cost shift between participants and  
12    nonparticipants. The PD does this by using  
13    customer bill savings to measure the costs of  
14    behind-the-meter resources, but this makes no  
15    sense from a legal or policy perspective.

16           The amount of money that customers  
17    save by reducing the use of energy from the  
18    grid is not a measure of that customer's  
19    cost. If that were true, we would calculate  
20    the cost of energy efficiency measures by  
21    looking at how much customers save when they  
22    are installed. But PUC precedent is clear  
23    that we should not measure the cost of  
24    actions that reduce energy by looking at how  
25    much money the customers saves.

26           On the benefit side, the proposed  
27    decision continues to rely on the avoided  
28    cost calculator to measure the benefits of

1 behind-the-meter resources, but the  
2 calculator substantially underestimates  
3 avoided transmission costs.

4           For example, the calculator assumes  
5 only \$482 million in capacity-related  
6 transmission projects for all three utilities  
7 between 2020 and 2025. However, this is only  
8 a small fraction of the actual transmission  
9 costs. In the proceeding on utility costs  
10 and the affordability of the grid, PUC staff  
11 reported that transmission-related revenue  
12 requirements for the utilities in 2021 alone  
13 exceeded \$4 billion. There's a real  
14 disconnect between the calculator's estimates  
15 of transmission costs and those estimated by  
16 PUC staff.

17           This is a huge omission. If we  
18 underestimate transmission costs, we  
19 underestimate the value of behind-the-meter  
20 resources to reduce those costs.

21           Because it continues to rely on  
22 inaccurate metrics, the PD ties itself in  
23 knots trying to justify the new tariff.

24           The Commission does not have to  
25 throw out the prior precedent or completely  
26 ignore tools like the avoided cost  
27 calculator. But to comply with the statutory  
28 mandate, the PD must be revised to

1 acknowledge the shortcomings of these tools  
2 for the purposes --

3 (Timer notification.)

4 MS. FOLK: -- of assessing costs and  
5 benefits in this proceeding. Thank you.

6 ALJ HYMES: Thank you.

7 Next is Matt Baker.

8 MR. BAKER: Can you hear me, your  
9 Honor?

10 ALJ HYMES: Yes. Please proceed.

11 ARGUMENT BY MR. BAKER

12 Your Honor and Commissioners, I'm Matt  
13 Baker. I'm director of the Office of Public  
14 Advocate, and I have three points to make.

15 One, the proposed decision  
16 acknowledges net energy metering is  
17 inequitable and needs reforms. Our rate  
18 increases continue to outpace inflation, and  
19 this puts our decarbonization goals at risk.  
20 NEM is one of the three main drivers of these  
21 rate increases.

22 I think the proposed decision says  
23 it best, quote:

24 The financial burden on the  
25 shrinking pool of nonparticipants  
26 is unsustainable and will fall  
27 disproportionately on lower-income  
28 customers.

1           Number two, the proposed decision  
2 improves the existing structure. It will  
3 reduce the cost shift from new solar  
4 customers by about \$1.8 billion a year by  
5 2030. It does this through two main reforms,  
6 first the transition to compensating exports  
7 based on the avoided cost calculator, and it  
8 requires new participants to be on rate plans  
9 that better align grid costs and customer  
10 bills. This is crucial if we're going to  
11 succeed in electrifying our economy.

12           With these improvements, the  
13 proposed glide path, the expanded federal  
14 incentives, and unfortunately increasing  
15 utility rates, the PD will provide new solar  
16 customers with roughly the same payback on  
17 solar investments that current customers have  
18 today.

19           My final point is that the  
20 Commission must find ways to address legacy  
21 NEM costs and equitable ways to recover fixed  
22 costs. Looking towards 2030, the cost to  
23 nonparticipants under the new PD are still  
24 expected to increase by \$2.8 billion a year  
25 to \$7.6 billion. This is largely the result  
26 of subsidies to current customers.

27           Equitable solutions exist. We must  
28 move quickly on income-based fixed charges,

1 and the Commission should consider further  
2 incentives to move current customers to the  
3 successor tariffs and install storage.

4 We estimate that providing all  
5 current NEM customers with a 30 percent cash  
6 rebate for add-on storage systems would cost  
7 \$4.3 billion, but it would save ratepayers a  
8 net of \$11.5 billion over 10 years.

9 You need a grid that is clean and  
10 that can electrify our economy. To get  
11 there, we must find ways to put downward  
12 pressure on rates. This decision is a step  
13 in the right decision, but we need to do  
14 more. Thank you.

15 ALJ HYMES: Thank you.

16 Next is Katie Ramsey.

17 MS. RAMSEY: Thank you, your Honor.  
18 Confirming that you can hear me.

19 ALJ HYMES: Yes.

20 ARGUMENT BY MS. RAMSEY

21 Thank you. I'm Katie Ramsey speaking  
22 on behalf of Sierra Club.

23 Our climate targets do depend on  
24 rooftop solar. To meet the targets in the  
25 draft CARB Scoping Plan, we need to exceed  
26 our best year of solar deployment by  
27 60 percent and sustain that pace for the next  
28 decade. Rooftop solar can and must play a

1 part of that deployment.

2 The PD is a considerable improvement  
3 from the prior PD, but two key changes are  
4 still needed. First, the glide path needs to  
5 be more gradual and step-downs need to be  
6 based on installed capacity instead of time.

7 NEM reform in other states shows  
8 that you can maintain steady solar  
9 deployments by reducing solar export values  
10 with gradual and predictable step-downs.  
11 States that made drastic and immediate cuts  
12 saw massive layoffs and crashes in solar  
13 deployments.

14 The PD's glide path doesn't  
15 accomplish what we need to for two reasons.  
16 First, it's more like a cliff than a path and  
17 drops the export value too drastically on day  
18 one to allow the industry to adapt.

19 Second, the step-downs are based on  
20 time rather than installed capacity. Sierra  
21 Club continues to recommend that the  
22 Commission decrease the export value with  
23 capacity-based step-downs instead of  
24 time-based step-downs. Decreasing the export  
25 value with each gigawatt of installed solar  
26 would protect against undervaluing solar and  
27 would ensure that the decreases are not more  
28 drastic than the industry can bear.

1           The second point or recommendation  
2           is to move existing NEM customers to  
3           electrification rates five years after  
4           interconnection. The PD places too many cost  
5           saving measures on new solar customers  
6           without making any changes for existing  
7           customers. This is an avoidable mistake.

8           Moving existing customers to  
9           electrification rates is consistent with  
10          Commission precedent, and the NEM handbook  
11          sets expectations by telling customers that  
12          their underlying rate may change. This  
13          change would also send current NEM customers  
14          a price signal to conserve energy during peak  
15          periods.

16          This past summer the state went to  
17          exceptional lengths to maintain grid  
18          reliability, suspending air permits, paying  
19          diesel backup generators to run, and calling  
20          on customers to voluntarily conserve. And  
21          yet, existing NEM customers currently have  
22          either a weak or nonexistent price signal to  
23          conserve during those hours.

24          The change would still provide bill  
25          savings to existing customers that electrify,  
26          so we urge the commission to take a second  
27          look at that proposal. Thank you.

28          ALJ HYMES: Thank you.



1                   Next is Ariel Strauss.

2                   MR. STRAUSS: Judge Hymes, this is  
3 Ariel Strauss for Small Business Utility  
4 Advocates. Am I coming in clear?

5                   ALJ HYMES: Yes. We can hear you.  
6 Please proceed.

7                   MR. STRAUSS: Thank you.

8                   ARGUMENT BY MR. STRAUSS

9                   SBUA views the new proposed decision as  
10 an improvement. However, four elements  
11 require revision.

12                   First, payback period. The PD  
13 metrics show small commercial customers  
14 obtaining a simple payback period of 7.5  
15 years in SDG&E's territory and 8.1 and 9.38  
16 in the remaining IOU territories, with small  
17 commercial customers solar plus storage  
18 systems offering a faster payback ranging  
19 from 5.8 and 7.49 years depending on the IOU.

20                   SBUA presented compelling national  
21 data that a payback period less than 7 years  
22 would result in systems being unaffordable  
23 for small commercial customers and the PD  
24 should be adjusted so that customers in all  
25 IOU territories can participate.

26                   Second, The PD provides residential  
27 customers a 9-year ACC lock-in period aligned  
28 with their payback period. In contrast,

1 small commercial customers are provided only  
2 a 5-year ACC lock-in period, far below their  
3 payback period.

4 According to page 25 of the Lookback  
5 Study, hardly any nonresidential systems are  
6 being installed. A shorter lock-in period  
7 offers small commercial customers with less  
8 certainty and, combined with their need for  
9 shorter payback periods, will likely lead to  
10 most small businesses being economically  
11 excluded from the NEM market.

12 Third, SBUA previously argued that  
13 NEM battery systems should be allowed to be  
14 charged from the grid to minimize peak demand  
15 and increase reliability of solar systems.  
16 We're not aware of any party opposing SBUA's  
17 proposal and SBUA requests that the PD  
18 section 8.5.3 include clarification that grid  
19 charging is allowed.

20 Last, the PD allows the legacy  
21 lock-in for residential customers to be  
22 transferred and continued by legal partner of  
23 the original customer. This should also  
24 apply to small commercial customers that are  
25 often involved in complex partnerships. The  
26 same attestation for legal partners that  
27 applies to residential customers should also  
28 be available to small commercial firms that

1 can demonstrate the account is being  
2 transferred in a business partnership that  
3 existed at the time the system was installed.

4 I look forward to the  
5 Commissioners' questions. Thank you.

6 ALJ HYMES: Thank you.

7 Next up, we have Sean Gallagher.

8 MR. GALLAGHER: Thanks, your Honor.  
9 Can you hear me?

10 ALJ HYMES: Yes.

11 ARGUMENT BY MR. GALLAGHER

12 Thank you. Good morning, your Honor  
13 and Commissioners. I'm Sean Gallagher, Vice  
14 President of State and Regulatory Affairs for  
15 the Solar Energy Industries Association, the  
16 national trade association representing the  
17 entire solar and storage industries from  
18 small business owners to large, publicly  
19 traded companies.

20 As an initial matter, I want to  
21 emphasize that the proposed decision's  
22 determination to reject levying fees on  
23 customers merely because the customers  
24 installed solar on their homes is absolutely  
25 the correct call. Imposing such fees would  
26 have been unprecedented, unsubstantiated, and  
27 likely unlawful.

28 The same is true for the PD's

1 determination not to impose charges on  
2 behind-the-meter consumption.

3 The industry also supports the PD's  
4 move to a net billing approach. We believe  
5 that under the circumstances found here, it's  
6 appropriate in California to transition away  
7 from full retail rate net metering.

8 That said, SEIA is concerned about  
9 the sufficiency of the mechanism afforded to  
10 the industry to transition from stand-alone  
11 solar to solar plus storage as its primary  
12 product.

13 The PD finds that the inclusion of a  
14 glide path is essential to the sustainability  
15 of the industry and adopts a form of glide  
16 path, the ACC adder, which benefits  
17 stand-alone solar more than solar plus  
18 storage in order to afford the necessary  
19 transition. But the adopted ACC adders are  
20 negligible, creating an initial step-down  
21 that is overly steep.

22 As I noted in my testimony in this  
23 case, other states that have implemented a  
24 similar cliff in the export compensation rate  
25 have seen sharp declines in the pace of solar  
26 deployment. A similar decline in California  
27 would be counterproductive since a viable  
28 solar market is critical to making the

1 necessary transition to storage.

2 The Commission should reconsider the  
3 adder levels, particularly for the initial  
4 step-down.

5 SEIA is also concerned regarding the  
6 short shrift which the PD gives the  
7 commercial and industrial sector, most  
8 notably agriculture, schools, and other  
9 public facilities.

10 The PD does nothing to ensure that  
11 this segment of the market will continue to  
12 grow sustainably.

13 It provides no transition for this  
14 market segment and affords this sector of  
15 customers only a five-year locked in period.

16 Given the size and costs of these  
17 projects, an accurate determination of the  
18 value proposition is critical in order to  
19 achieve the necessary financing. Such can't  
20 be done when the export compensation  
21 fluctuates after five years.

22 So the Commission should consider a  
23 more reasonable locked in period for the C&I  
24 sector.

25 And finally, SEIA believes that the  
26 PD does not go far enough to enable solar and  
27 storage for low-income customers. The  
28 long-term success of clean energy depends on

1 delivering its benefits to all customers. We  
2 echo the comments of Vote Solar regarding the  
3 low-income sector. Thank you. ]

4 ALJ HYMES: Thank you.

5 Next is Matthew Freedman.

6 ARGUMENT BY MR. FREEDMAN

7 Thank you. Matt Freedman on behalf of  
8 The Utility Reform Network.

9 We are disappointed with the new  
10 proposed decision because it represents  
11 another missed opportunity.

12 The PD's core flaw is its failure to  
13 reduce solar tax, and by the solar tax, I  
14 mean the rapidly growing portion of retail  
15 rates that all customers pay to subsidize  
16 participants in the net metering program.  
17 Record evidence shows that the annual cost  
18 shift associated with the legacy net metering  
19 was 3.4 billion dollars in 2021. But since  
20 2021, retail rates and customer rooftop solar  
21 installations have risen significantly, and  
22 the cost shift now exceeds 4 billion dollars  
23 per year, which is three to four times the  
24 cost of the entire CARE program and more than  
25 10 percent of all the rate revenues collected  
26 by the Three Investor-Owned Utilities. The  
27 cost shift is poised to grow substantially in  
28 the coming years under the modest reforms in

1 the proposed decision.

2 And despite confirming that the  
3 current policy is manifestly unfair to  
4 nonparticipants, the new proposed decision  
5 fails to offer a meaningful course  
6 correction. It endorses the use of quickly  
7 escalating retail rates to compensate a large  
8 portion of behind the meter production. It  
9 provides unjustified subsidies for exports  
10 and raises customer rates to cover this  
11 additional cost. It does not tackle the  
12 growing cost work associated with legacy net  
13 metering, and as a result, the new tariff is  
14 not scalable to accommodate significant  
15 increases in participation without creating  
16 massive rate distortions over time.

17 Additionally, the proposed decision  
18 does not account for key developments that  
19 will shorten the payback period for new  
20 rooftop solar customers. The modelling in  
21 the PD does not consider the 900 million  
22 dollars from the state general fund to  
23 incentivize new solar plus storage for  
24 low-income customers and new storage for  
25 higher income customers. It doesn't consider  
26 the full impacts of new and expanded federal  
27 tax credits especially for leased systems,  
28 and it assumes a 4 percent average annual

1 rate escalation which determine the credits  
2 for self-consumption, but this is  
3 inconsistent with other Commission  
4 analysis --

5 (Off the record.)

6 ALJ HYMES: We'll be back on the  
7 record.

8 While we were off the record, we  
9 discovered that our court reporter had lost  
10 connection. So we are going back to a prior  
11 speaker.

12 Mr. Freedman, please proceed.

13 MR. FREEDMAN: Thank you, your Honor.  
14 Where we last left off in the record, I was  
15 noting that the proposed decision does not  
16 account for key developments that are going  
17 to shorten the payback period for new rooftop  
18 solar customers. And one of the assumptions  
19 in the PD that is wrong is it assumes a 4  
20 percent average annual retail rate  
21 escalation, and these rates will determine  
22 the credits for the self-consumption. But  
23 this 4 percent assumption is not consistent  
24 with other Commission analysis that projects  
25 annual rate increases of up to 9 percent.  
26 Bigger future rate increases will shorten  
27 solar payback periods and increase returns  
28 for solar customers.



1           Finally, reforming net metering has  
2   no impact on California's decarbonization  
3   objectives. State law requires a transition  
4   to a zero carbon electric grid in  
5   approximately two decades with aggressive  
6   interim targets. The question is not whether  
7   we are going to decarbonize the grid. It's  
8   how we're going to get there, how much it's  
9   going to cost and who is going to pick up the  
10   tab.

11           Thanks for the opportunity to  
12   present today.

13           ALJ HYMES: Thank you.

14           And let's go back to Mr.  
15   Constantine.

16           ARGUMENT BY MR. CONSTANTINE

17           And I will start from the top. Sorry  
18   to repeat. Good morning, Commissioners and  
19   Judge Hymes. My name is Sachu Constantine.  
20   I am the executive director of Vote Solar.  
21   We are a national nonprofit advocacy  
22   organization working to ensure a clean energy  
23   future powered by solar that is just,  
24   equitable and accessible to all and where  
25   distributed energy resources play a key role  
26   in bringing down the cost and ensuring the  
27   reliability of that future clean energy  
28   portfolio.

1           While acknowledging, as others have,  
2           many of both the positive and problematic  
3           aspects of this decision, at a high level, we  
4           want to emphasize the need for a course  
5           correction to properly serve disadvantaged  
6           communities and families and point to some  
7           possible improvements with respect to serving  
8           all customers and our clean energy future.

9           First of all, the definition of  
10          low-income eligibility is too restrictive as  
11          CARE and FERA are underutilized and do not  
12          capture the full array of low-income and  
13          otherwise disadvantaged households. By some  
14          estimates, more than 2 million customers are  
15          below 80 percent of area median income and  
16          are not currently on CARE or FERA.

17          The dollar-per-watt installed cost  
18          of solar is too low as others have noted.  
19          The state's own disadvantaged communities and  
20          single-family affordable solar homes data  
21          shows the real cost of these households is  
22          \$4.28 per watt installed rather than \$3.30  
23          used here. This would have a significant  
24          impact on the current payback periods or  
25          corrected adders.

26          The equity fund was a great idea  
27          included in the last proposed decision but  
28          has now been punted to an uncertain future

1 that will depend on a broad array of demands  
2 on the SGIP program moneys and further  
3 deliberation and approval are subject to the  
4 legislature.

5 We also have some concerns about the  
6 ability of institutions that serve  
7 disadvantaged communities, like churches and  
8 schools, being able to affordably access  
9 rooftop solar in the new commercial paradigm.  
10 We echo SEIA's concern and feel a longer  
11 lock-in of the ACC for commercial customers  
12 would be a big help and also inclusion on the  
13 ACC plus.

14 As for the broader market, we do  
15 support the rejection of any punitive solar  
16 fee or tax including leaving behind-the-meter  
17 consumption alone as good principles dictate.  
18 We are positive about the protection for  
19 legacy customers and the use of TOU rates,  
20 good time-of-use rates or the right signals  
21 are sent. We will seek a smaller first step,  
22 as others have noted in the glidepath, to  
23 allow for an orderly transition from  
24 solar only to solar storage and the inclusion  
25 of those realistic installed costs to  
26 calibrate ACC plus adders. We really, beyond  
27 that, would like to uplift the comments of  
28 SEIA, grid --

1 (Timer notification.)

2 MR. CONSTANTINE: -- filing more  
3 details in writing. Thank you.

4 ALJ HYMES: Thank you.

5 Next up is Bill Allayaud.

6 (No response.)

7 ALJ HYMES: Mr. Allayaud, we can't hear  
8 you. Check your mute button.

9 MR. ALLAYAUD: Can you hear me now?

10 ALJ HYMES: Yes, please proceed.

11 ARGUMENT BY MR. ALLAYAUD

12 Good morning, Commissioners and your  
13 Honor. I am Bill Allayaud, California  
14 director of government affairs for the  
15 environmental working group. The major  
16 utilities are in the business of selling  
17 consumers electronics, and their business model  
18 points them to utility-scale renewables and  
19 storage to meet their carbon reduction goals.

20 Therefore, rooftop solar on homes  
21 with accompanying battery storage as well as  
22 microgrids are seen as competition to that  
23 business model.

24 The PUC should be championing  
25 distributed generation instead of a NEM rate  
26 structure or excessive fixed charges that  
27 will discourage DG. The emphasis should be  
28 on keeping the cost of installing and

1 operating rooftop solar as low as possible  
2 for everyone while finding ways to bring more  
3 low-income families into the program rather  
4 than configuring the program so that it  
5 discourages middle and higher income  
6 households from doing the right thing.

7 Finally, the PUC should recall that  
8 you were requested by 16 California congress  
9 persons in a recent letter to you to resist  
10 using the Landmark Inflation Reduction Act  
11 incentives for expanding solar as  
12 justification to impose drastic and immediate  
13 export rate reductions or discriminatory fees  
14 or which would stymie growth of the clean  
15 energy source --

16 (Timer notification.)

17 ALJ HYMES: Thank you.

18 And our last speaker is Charles  
19 Adams. Mr. Adams.

20 ARGUMENT BY MR. ADAMS

21 Charles Adams, Albion Power Company.

22 The ACC employs false values, we  
23 feel, to establish the worth of utility scale  
24 solar in the PD.

25 The ACC externalizes distribution  
26 costs and environmental destruction. It  
27 externalizes 60 percent of the cost of solar  
28 farms being bought as tax equity by the

1       wealthiest one percent on Wall Street.

2               Two to five cents for solar farms is  
3       a post-tax shift number.

4               Local economies created by NEM  
5       generate local clean energy, local jobs,  
6       local tax revenue, equity and environmental  
7       preservation.

8               The ACC is a wealth shift away from  
9       local economies towards utility  
10       infrastructure projects and Wall Street tax  
11       credits. Somehow in your model a solar farm  
12       destroying virgin land in Canada counts as  
13       clean energy but a rooftop solar project in  
14       Oakland does not count, which makes no sense.

15              The ACC perpetuates economics where  
16       environmental assets are destroyed and called  
17       income without accounting for their permanent  
18       loss. Rooftop solar is undervalued in the  
19       ACC, and we feel the PD misses the point of  
20       most of the work we've done in the past 20  
21       years.

22              Thank you for letting me speak.

23              ALJ HYMES: Thank you.

24              At this time, I want to turn to our  
25       Commissioners. We are running a little late.  
26       I just wanted to ask if there are any  
27       Commissioners that need to leave directly at  
28       noon and would like to move up in line?

1 Originally I had planned to have Commissioner  
2 Houck go first.

3 Is there anyone with time conflicts?  
4 (No response.)

5 ALJ HYMES: Okay. Hearing none,  
6 Commissioner Houck, do you have any  
7 questions?

8 COMMISSIONER HOUCK: Yes. I have --  
9 hopefully, we could get -- and the first  
10 question I'd like to hear specifically from  
11 the investor-owned utilities and ratepayer --  
12 and it goes to equity. I think equity's been  
13 a major issue raised on both sides of this,  
14 whether it's cost shifting for disadvantaged  
15 customers or access to being able to have  
16 rooftop solar on their homes.

17 And so my question goes to whether  
18 the PD meets our ESJ action plan goals and  
19 that the prior decision looks at tariff  
20 benefits that went to disadvantaged  
21 communities and tribal communities, and the  
22 current proposed decision looks at customers  
23 that are enrolled in CARE/ESA, which could  
24 effectively exclude or create barriers for  
25 underrepresented populations and tribal  
26 members.

27 And so my question is whether -- and  
28 I think some of this was raised by Mr.

1 Campbell and Mr. Constantine -- whether the  
2 IOUs and ratepayer advocates have any  
3 perspective or opinions or whether it does,  
4 in fact, create barriers and may potentially  
5 exclude some underrepresented and tribal  
6 communities that may be bearing a  
7 disproportionate energy or economic inclusion  
8 burden in regards to energy use.

9 MS. PETERMAN: Sorry. Trying to get  
10 off mute. Commissioner Houck, this is Carla  
11 Peterman. Thank you for the question. I  
12 would just say I think it's a good question.  
13 We'll be happy to respond in more detail in  
14 our comments. Especially there was different  
15 equity programs that were proposed, as you  
16 noted, part of the record, now as being  
17 proposed by the Commission has addressed this  
18 through subsidies with SGIP. So I do think  
19 it's worth looking at if the structure in  
20 SGIP appropriately supports these  
21 communities.

22 And again, we do think that  
23 addressing the fixed charge in the next  
24 proceeding or this proceedings is going to be  
25 an important part on the economic side of  
26 equity.

27 ALJ HYMES: And can we have someone --  
28 I believe the Commissioner wanted someone



1 from Public Advocates to address this issue  
2 as well.

3 MR. BAKER: Yeah. Can you hear me?

4 ALJ HYMES: Yes.

5 MR. BAKER: Okay. Yes. I would just  
6 say as far as it goes, the PD does address --

7 ALJ HYMES: I'm sorry. Can you please  
8 identify yourself.

9 MR. BAKER: Matt Baker, director of the  
10 Public Advocates Office.

11 And we would argue that as far as it  
12 goes, the PD does address equity issues, and  
13 I would just say we would define equity  
14 issues -- or the most important equity issues  
15 is how can we get clean power at the lowest  
16 possible cost to the -- you know, to have the  
17 greatest penetration throughout the system.  
18 And so we're looking at it from that lens.

19 And to the extent that it addresses  
20 cost-shift issues particularly with new  
21 customers, it does so. And you know, we  
22 believe the Commission also has plans to  
23 address those issues, you know, through  
24 things like income-based fixed charges that  
25 would also help a great deal.

26 MS. TIERNEY: Judge Hymes, may I make  
27 an additional comment?

28 ALJ HYMES: Please identify --

1 MS. TIERNEY: Yeah. Sue Tierney from  
2 Analysis Group.

3 The only addition that I wanted to  
4 make is to say that the Inflation Reduction  
5 Act includes not only tax credits that are  
6 available for rooftop solar and storage,  
7 which are less helpful to low-income and  
8 disadvantaged communities by virtue of the  
9 fact that they may not have taxable income,  
10 the IRA also includes a greenhouse gas  
11 reduction fund substantial portions of which  
12 have to go to support clean energy  
13 investments in disadvantaged communities. So  
14 there are placed in that policy which will  
15 help advance these objectives in California.

16 Thank you.

17 ALJ HYMES: Commissioner Houck, any  
18 other questions?

19 COMMISSIONER HOUCK: Just -- our  
20 next -- other question is for Mr. Gong  
21 regards -- from or Aurora Solar. He  
22 mentioned that the new PD provides  
23 continually changing 576 different rates  
24 which complicates the issue for consumers,  
25 and I would just ask if he could explain in a  
26 little more detail his recommended solution,  
27 what he's proposing for the PD.

28 MR. GONG: Yes. We recommend following

1 an export rate that is adjusted to this -- to  
2 the avoided cost calculator following the  
3 time of use found in the otherwise applicable  
4 rate schedules. I believe --

5 (Reporter clarification.)

6 MR. GONG: We would recommend that the  
7 export rate be tied to the time of use of the  
8 otherwise applicable schedules that the  
9 customer is enrolled in, such as E-ELEC for  
10 PG&E and so forth. The export rate would be  
11 scaled to an average of some sort based on  
12 the ACC export, as CALSSA and SEIA have  
13 offered in their proposals and testimony.

14 COMMISSIONER HOUCK: Thank you. And  
15 Judge Hymes, I don't have any more questions.

16 ALJ HYMES: Okay. Thank you.

17 Commissioner Rechtschaffen.

18 COMMISSIONER RECHTSCHAFFEN: Thank you,  
19 Judge, and thank you to the parties for being  
20 remarkably succinct. I have two questions.  
21 The first is directed to Brad Heavner at  
22 CALSSA and John Gallagher at SEIA, and it  
23 deals with the payback period. And I just  
24 want to understand and situate your thinking  
25 on the payback period. In filings in this  
26 proceeding, counsel stated (inaudible) of  
27 seven-year payback's appropriate, nine years  
28 could be a backstop. And SEIA said we should

1 have a 10-year payback for solar plus storage  
2 customers. The PD provides for nine years  
3 for standalone solar customers, seven years  
4 for solar plus storage.

5 My question is, between seven and  
6 nine years -- this is for you, Brad, maybe,  
7 but I want Sean to comment as well. How do  
8 we know -- on what do you base your assertion  
9 that that's very significant, that that will  
10 lead to, you know, undesirable market  
11 disruption?

12 And then the second question related  
13 to that. You heard a lot today about how the  
14 payback period is based on assumptions that  
15 may be unduly conservative. In particular,  
16 about rates, that rates may be unfortunately,  
17 because of inflation and other factors,  
18 escalating that twice the rate that's assumed  
19 in the PD. So given that, won't -- isn't  
20 there an argument that the payback period  
21 that will be much closer to where you'd like  
22 to go?

23 So maybe Brad, you could address the  
24 two question first and then Sean. ]

25 MR. HEAVNER: Yes, thank you,  
26 Commissioner.

27 The -- the -- the biggest difference  
28 is being under water with a loan versus

1   having loans be viable. The payback period  
2   and monthly savings from a loan are opposite  
3   sides of the exact same coin. You do  
4   something to improve payback, and you do  
5   something to improve -- it -- it also  
6   improves savings from a loan. So, nine-year  
7   payback -- the -- the conditions that would  
8   lead to a nine-year payback would lead to  
9   being underwater with a loan; and with seven  
10   years, it would not. Loans would be viable,  
11   and it's essential that we make loans viable  
12   for low- and moderate-income customers to  
13   participate.

14               One difference between the solar and  
15   the solar and storage model paid back by the  
16   E3 calculator is they're assuming an  
17   extremely sophisticated storage algorithm to  
18   maximize savings for customers that is really  
19   unrealistic in the short-term. It's  
20   something to aspire to in the long-term, but  
21   to be able to maximize minute by minute, the  
22   charge and discharge of a battery to maximize  
23   the customer savings is unrealistic in the  
24   short-term, so that -- that measured payback  
25   from storage and storage is -- from the user  
26   calculator is unrealistic. It's -- it's too  
27   low.

28               Those are very important points. Is

1     that -- is that enough to answer your  
2     questions?

3             COMMISSIONER RECHTSCHAFFEN:   What about  
4     the rate escalations?

5             MR. HEAVNER:   Well, it -- it is  
6     going -- I -- I mean, more than four percent  
7     rate escalation is something that we should  
8     work hard to avoid, and I think due to  
9     electrification, it should be avoidable.  
10    That we should be less than four percent and  
11    even negative.  If we are -- are expanding  
12    the number of kilowatt hours that are  
13    purchased from the utilities that will push  
14    down rates, and I don't think assuming rate  
15    escalations higher than four percent is a  
16    good idea; and even four percent, I consider  
17    an upper bound.

18            COMMISSIONER RECHTSCHAFFEN:   Okay,  
19    thank you.

20                    Sean?

21            MR. GALLAGHER:   Thank you,  
22    Commissioner.

23                    First, I'll -- I agree with,  
24    essentially, what Brad said, and he is right  
25    that most -- most solar systems, even owned  
26    solar systems by customers are financed; and  
27    if you don't include the financing cost that  
28    is going to extend the payback period.

1           So, the -- we think the nine-year  
2     payback period that the PD shoots for is --  
3     is about right; however, I note that the PD  
4     does assume solar costs are actually a little  
5     bit lower than what we're actually seeing in  
6     the market. In the last year and a half or  
7     so, we have seen solar cost increase as a  
8     result of supply chain issues primarily; and  
9     so -- so that's -- that is an issue, but I  
10    think the target is about right.

11           I would typ -- I generally agree  
12    with Brad on the -- on the issue of  
13    escalating of rates but the -- again, because  
14    the -- because the cost for solar that are  
15    assumed in the PD are a little less than  
16    actual, that is going to balance that out.

17           COMMISSIONER RECHTSCHAFFEN: Well, I  
18    would just say, of course, Brad, we want to  
19    keep down rates; and we're doing everything  
20    possible that we can. A -- a lot of it is  
21    out of our control. We don't control  
22    inflation, of course, but absolutely we -- we  
23    are not expecting them as -- as given.

24           I should also say, in response to  
25    what you said, Sean, we certainly hope, and I  
26    know the solar industry certain hopes, that  
27    cost of solar will go down; and that we can  
28    -- we should build in and just accept as a

1 given that the cost keeps going up.

2 So, you know, that -- that can cut  
3 in a different direction as well.

4 Okay. I --

5 MS. PETERMAN: Commissioner  
6 Rechtschaffen?

7 COMMISSION RECHTSCHAFFEN: -- have one  
8 more -- excuse me?

9 MS. PETERMAN: Commission  
10 Rechtschaffen, this is Carla -- this is Carla  
11 Peterman. I just want to correct the record  
12 on one thing that Brad said.

13 The current calculation from the  
14 Commission assumes no escalation in rates, so  
15 he identified a four percent would be  
16 reasonable. There is no assumption of  
17 escalation of rates; and, in fact, the way  
18 that solar companies sell their products to  
19 their customers, they sell it on -- using an  
20 escalated payback. They focus on the fact  
21 that rates are going up; and so, really, it's  
22 important to be consistent with the practice  
23 of the solar industry and really where we're  
24 seeing rates go.

25 I appreciate the opportunity to  
26 offer that comment.

27 MR. HEAVNER: And when I say that  
28 seven-year payback is equivalent to being



1     able to save money with a loan, I am talking  
2     about a simple payback. That is just the --  
3     just the upfront costs, and the first-year  
4     savings.

5             The -- the PD rightly adopts that as  
6     the metric just because it's very straight  
7     forward and gets rid of these -- these  
8     assumptions that are controversial.

9             COMMISSIONER RECHTSCHAFFEN: Judge, do  
10    I have time for one more question?

11            ALJ HYMES: Yes, you may.

12            COMMISSIONER RECHTSCHAFFEN: Okay.  
13    This, again, is to you, Brad; and this is  
14    something that we've heard from CALSSA in the  
15    media. You didn't mention this directly here  
16    but I want to just ask you about it -- and if  
17    you don't want to comment about it, you don't  
18    have to -- but there's been a lot of talk  
19    about how the -- flaws in the decision  
20    because of a very steep drop in the export  
21    value; and I heard you -- I appreciate what  
22    you said that we need to move away from  
23    retail rates for the avoided cost calculator,  
24    but you -- there's been a lot of talk about  
25    how steeply that is going to -- the export  
26    rate is going to drop, and that will create  
27    too steep a change in year one for the solar  
28    industry; and the number -- that number, to

1 me, seems to be misleading because it's only  
2 one-half of the equation. As we heard a lot  
3 of parties say here today, solar customers  
4 are net-billing tariffs saving a lot of their  
5 money -- most of their money by avoiding  
6 imports.

7 So, isn't the relevant figure one --  
8 in terms of figuring out what the change in  
9 savings will be, isn't it one that combines  
10 both the decline in import and export  
11 compensation as well as one that it reflects  
12 import savings?

13 MR. HEAVNER: Absolutely. You need to  
14 look at the whole picture. But the -- the  
15 comments are based on the fact that when  
16 there's a 75 reduction in the export credit  
17 in day one that, as part of the whole, is too  
18 much. It's too much of a shock, and I don't  
19 think it's too much to ask for that to be a  
20 little smoother.

21 We're not saying straight line from  
22 current savings to future end stage, but less  
23 of a steep drop in stage one.

24 COMMISSIONER RECHTSCHAFFEN: Thank you.

25 MR. GALLAGHER: That's really the  
26 correct approach.

27 COMMISSIONER RECHTSCHAFFEN: Thank you,  
28 Judge.

1           ALJ HYMES: Let's move on to  
2 Commissioner John Reynolds.

3           COMMISSIONER JOHN REYNOLDS: Thank you  
4 Judge Hymes.

5           I have a question for Mr. Heavner  
6 that maybe follows nicely on Commissioner  
7 Rechtschaffen's question.

8           I will be focused on the export side  
9 here. Mr. Heavner and, perhaps,  
10 Mr. Gallagher or Mr. Constantine would also  
11 like to speak to this, because I've heard  
12 similar things from them, you know, thinking  
13 about a phase in of the export transition.

14           As you're well aware, electric rates  
15 in California are generally volumetric. The  
16 costs are recovered in the retail rates, not  
17 just the cost of power purchased by a CCA or  
18 a utility; and those include, of course,  
19 costs like utility lineworker wages, costs  
20 for utility poles and wires, wildfire  
21 mitigation costs and many others.

22           When you propose a phasing in of an  
23 ACC rate or a rate similar to the ACC for  
24 solar customer exports, are you suggesting  
25 that it's fair for non-solar customers to  
26 effectively pay solar customers a rate that  
27 includes these types of grid costs for the  
28 distributed energy production, and how would

1     you propose that we justify that to non-solar  
2     customers?

3             MR. HEAVNER: Well, I think it's  
4     important to have a long-term view. The --  
5     if we decimate the ability to install clean  
6     energy in communities where we're going to be  
7     adding loads and electric vehicles that will  
8     hurt us in the long run. We are heading  
9     towards 100 percent clean energy. That is  
10    going to be very difficult. If we think it's  
11    going to be cheaper and easier to do it all  
12    with large-scale power plants in the desert  
13    and new transmission lines, we're kidding  
14    ourselves. It's just not right; and so,  
15    there is savings to be had in the long run.  
16    If we don't -- oh, I -- I don't want to get  
17    to the place 10 years from now when we look  
18    back and we're behind on our greenhouse gas  
19    goals and the cost of large-scale renewables  
20    has gone a lot higher, and we're kicking  
21    ourselves for having partially wasted the  
22    previous 10 years; that is what I am trying  
23    to avoid.

24            MR. GALLAGHER: Commissioner, the  
25    Commission should be guiding by the statute  
26    that includes both cost effectiveness test  
27    and sustainable growth; and so, that's the  
28    balance that you're trying to strike or

1     should be trying to strike, and as Brad says,  
2     we don't want to shoot ourselves in the foot  
3     in the near-term to avoid progress that we  
4     need in the longer term.

5             MR. CONSTANTINE: Commissioner, I -- I  
6     don't think I can add anymore eloquence than  
7     -- than Sean or Brad already have. Also,  
8     we're taking the long view. It is our -- it  
9     is our position that this framing, the -- the  
10    massive cost shift is in and of itself  
11    flawed, in that as Brad points out and Sean  
12    points out, the sustainable solar industry is  
13    key to reducing the cost of the future energy  
14    portfolio.

15            Our modeling shows that there are  
16    tens of billions, if not hundreds of billions  
17    of dollars at stake in the cost of that  
18    future portfolio. Optimizing the cost of  
19    transmission, optimizing the development,  
20    sustainability and reliability of our  
21    distribution system. All of that is what is  
22    on the table here, and we feel that a -- a  
23    gradual smooth transition of ensuring the  
24    growth of the solar industry, while moving to  
25    an ACC putting with time-of-use rates that is  
26    the appropriate path, and we think a steep  
27    cliff is probably not the -- the best way to  
28    start off on that -- on that ride.

1           COMMISSIONER JOHN REYNOLDS:  I  
2    appreciate --

3           MS. PETERMAN:  Commissioner Reynolds,  
4    this is --

5           COMMISSIONER JOHN REYNOLDS:  -- that --

6           MS. PETERMAN:  Commissioner Reynolds,  
7    this is Carla Peterman, can I add one comment  
8    on the question?

9           COMMISSIONER JOHN REYNOLDS:  Please, go  
10   ahead.

11          MS. PETERMAN:  What I didn't hear at  
12   all today is the solar industry's openness  
13   and willingness to pay any fixed charges, and  
14   that is a big part of the proposed decision  
15   is to have that conversation as part of the  
16   demand flexibility rulemaking.

17                 In fact, just yesterday, the solar  
18   party's in an Edison advice letter said they  
19   should not pay the wildfire securitization  
20   fixed charges even though -- the  
21   non-bypassable charges -- even though the  
22   Commission ordered that in a decision.

23                 So, I thought your question was  
24   really getting at, at what point do NEM  
25   customers pay any fixed charges, and I would  
26   be interested in knowing if they're willing  
27   to say today that they would be open to an  
28   appropriate fixed charge as a part of the

1 flexibility rulemaking?

2 MR. HEAVNER: The proposed decision  
3 accurately portrays our position that we  
4 think it's better when addressed to all  
5 residential customers, and we will be  
6 supportive of that in the demand flexibility  
7 rulemaking.

8 MS. PETERMAN: I --

9 MR. GALLAGHER: We propose -- we  
10 proposed -- we propose for the use-solar  
11 customers to honor these electrification  
12 rates. We do have fixed charges.

13 MS. PETERMAN: Interesting. I find  
14 that very inconsistent with your filings in  
15 other proceedings, but I appreciate you  
16 clarifying that today.

17 ALJ HYMES: Commissioner Reynolds, do  
18 you have any follow-up questions?

19 COMMISSIONER JOHN REYNOLDS: I would  
20 like to briefly follow up with Mr. Heavner,  
21 who I will ask to lead the way, and then I  
22 have one additional question that will be  
23 relatively brief, I think.

24 I can appreciate the desire not to  
25 have a quick transmission to a different  
26 export compensation model.

27 I'm understanding you to be saying  
28 today that you think that there is

1 justification to move to a different export  
2 compensation model, and I would like to hear  
3 from you what -- what you think we should be  
4 telling non-solar customers about what  
5 justifies raising in that better export  
6 compensation model as opposed to moving to it  
7 right away?

8 MR. HEAVNER: We really don't think  
9 there is objection to this concept. When we  
10 talk to -- so, customers --  
11 individual Californians all over -- we have  
12 polled on this, we have had meetings, we have  
13 done all sorts of interaction with the  
14 public. People want more solar. People  
15 think it's crazy that we would pull back  
16 support for solar energy even if it is a  
17 subsidy.

18 I don't think that there is  
19 explaining that needs to happen. People want  
20 you to support more solar in California.

21 COMMISSIONER JOHN REYNOLDS: Thank you.  
22 I will switch gears. I have a brief question  
23 for Dr. Peterman.

24 I want to make sure I understood one  
25 of your suggestions correctly. When -- I  
26 think you indicated that NEM 1 and NEM 2  
27 customers should not transition at the end of  
28 their tariff period to a tariff with a



1 subsidy.

2 Is it your position that those  
3 customers should not transition to the  
4 net-billing tariff NSB?

5 MS. PETERMAN: It is, Commissioner  
6 Reynolds, because as it stands right now, the  
7 Commission's PD acknowledges the net-billing  
8 tariff does still include the subsidies, and  
9 we don't think that is appropriate for NEM  
10 1.0 and NEM 2.0 customers.

11 A challenge is, there is not a  
12 no-subsidy tariff yet to transmission them  
13 to, so the Commission could consider a track  
14 to establish that or to be a part of the  
15 demand flexibility OIR.

16 For an easier fix right now, it  
17 should say that when NEM 1 and 2 customers go  
18 off of their current tariffs that they're not  
19 exempted from non-bypassable charges. That  
20 would go contin -- that would go further but,  
21 ultimately, yes. We think right now, you  
22 default them here, it still gets a  
23 significant subsidy.

24 COMMISSIONER JOHN REYNOLDS: Thank you.

25 I will turn it to back to you, Judge  
26 Hymes.

27 ALJ HYMES: Okay. Thank you, next up  
28 is Commissioner Shiroma.

1                   Do you have any questions for our  
2 panelists?

3                   COMMISSIONER SHIROMA: Yes. Thank you,  
4 Judge Hymes. I have one question.

5                   And my question has -- I will -- I  
6 will name who I -- I will be choosing who --  
7 to respond to my question, but it has to do  
8 with the \$900 million for a new storage  
9 incentive program, and 130 million of which  
10 is reserved for low-income disadvantaged  
11 communities; and my question is going to be  
12 for Roger Lin with Center for Biological  
13 Diversity, Matthew Freedman with TURN, and  
14 Dr. Peterman with PG&E and -- and  
15 Dr. Peterman, I harken back to your days as a  
16 CPUC Commissioner -- presiding as a  
17 Commissioner instrumental on the advancement  
18 of storage.

19                   I -- so, here is my question to the  
20 three of you: you -- do you foresee that if  
21 -- \$900 million is a lot of money, but the  
22 price of storage is such that this will only  
23 go so far. But it does -- that the proposed  
24 decision does provide for an infusion of  
25 effort and resources into low-income  
26 communities. Overall, do you -- do you  
27 foresee -- and if you don't know the answer  
28 to this question, that's fine.

1           Do you foresee that this infusion of  
2 monies, and, particularly, for the  
3 lower-income communities, has the opportunity  
4 to bring the cost of battery and storage down  
5 towards advancing the opportunity for  
6 further -- further opportunities for  
7 homeowners and commercial customers to invest  
8 in -- in storage.

9           Who wants to go first?

10          MR. LIN: I have two quick responses to  
11 the Commissioner's -- for the questions.

12          The first is just echoing the  
13 comments from GRID Alternatives that there's  
14 no assurity -- there's no certainty that the  
15 900 million will be benefitted, so that's  
16 first point.

17          The second point is this proceeding  
18 is -- it really shouldn't only be about  
19 barriers. Like, why aren't there more  
20 renewable resources or clean energy resources  
21 in disadvantaged communities than ESJ  
22 communities? The prior equity fund was going  
23 to be informed by collecting environmental  
24 justice voices to see how that money in the  
25 equity fund could best be spent. We cannot  
26 compare funds for storage only to overcoming  
27 those barriers with input from environmental  
28 justice stakeholders, so it really does all

1     come down to barriers.  If we have less  
2     barriers, we have more clean energy resources  
3     in the ESJ communities, and the alleged cost  
4     shift would become the -- that argument would  
5     become even clearer if access was resolved;  
6     and barriers, again, really is the issue that  
7     we have to address.

8             COMMISSIONER SHIROMA:  Thank you,  
9     Roger.

10            MS. PETERMAN:  I am happy to -- I am  
11     happy to go next Commissioner Shiroma, if  
12     Mr. Freedman is okay with that.

13            First of all, I will say that, I  
14     think the infusion of dollars from the  
15     legislation and taxpayers is appropriate.  We  
16     do want to be funding these programs with  
17     taxpayers so that everyone pays.  When we do  
18     them as ratepayer, customer-funded programs,  
19     as we talked about a lot today, there are  
20     customers including NEM who end up being not  
21     actually being a part of that funding.

22            I -- I think it's great what the  
23     legislature has done, and I applaud the  
24     proposed decision for dedicating 70 percent  
25     of the funding to low-income communities.

26            I do think all -- all of plans of  
27     storage help lower the costs, but there are  
28     also other things that are driving down the

1 cost of storage. There is increasing  
2 improvement around battery development.  
3 There is improvement in integration.

4 So, regardless, we are going to see  
5 the cost of distributed storage go down but  
6 again, I do think this helps make it more  
7 available.

8 I would encourage the Commission as  
9 a part of SGIP to look at, though, how do you  
10 make sure this really gets to disadvantaged  
11 communities, and how do you make sure that  
12 whoever gets it are able to participate and  
13 provide grid services. Distributor storage  
14 right now is at a private benefit. If we  
15 wanted to have true grid benefits, we have to  
16 make sure we've got the right pricing  
17 signals, and that we're really think about as  
18 well targeting areas where it's needed for  
19 resiliency or there is some capacity  
20 constraints.

21 So, I think there's an opportunity  
22 here for the Commission to further lean in  
23 into the SGIP proceeding review of this. ]

24 MR. FREEDMAN: Matt Freedman here with  
25 TURN.

26 TURN for many years has been urging  
27 the Commission and the legislature to look at  
28 alternative sources of funding to support

1 many of these public purpose initiatives.  
2 We've pointed out -- and it's  
3 uncontroverted -- that the collection of  
4 these types of costs and rates is extremely  
5 economically regressive.

6 The way to spread these costs in a  
7 progressive manner is to collect them through  
8 sources outside of rates and particularly  
9 through income taxes. This year the  
10 legislature responded with an historic set of  
11 appropriations for climate and clean energy,  
12 almost \$8 billion.

13 The fund that's identified in the PD  
14 is one of those spending initiatives. And  
15 hopefully it will be used to provide up-front  
16 buydowns for these systems.

17 Low-income customers face barriers  
18 to access in capital and getting financing.  
19 The very most valuable money that they can  
20 receive is an off-the-top rebate up front.  
21 We think that these funds can provide that  
22 exact type of benefit, and we think they can  
23 go a long way towards encouraging the  
24 deployment of both solar and storage for  
25 low-income customers.

26 Over the longer term, we expect  
27 storage to get cheaper, in particular because  
28 of the huge amount of federal government

1 support for the storage industry, the  
2 manufacturing, and other elements of the  
3 supply chain, along with tax incentives that  
4 are going to bring down the cost of storage  
5 over time and make it easier for customers to  
6 adopt it.

7 We will continue to argue in front  
8 of every forum for additional funding to  
9 support these initiatives coming from sources  
10 outside of rates, and we think that should be  
11 the focus paired with a rational net billing  
12 tariff that does not shift costs to  
13 nonparticipating customers, specifically the  
14 least vulnerable customers out there who are  
15 facing a crisis of affordability today.  
16 Thanks.

17 COMMISSIONER SHIROMA: I think you  
18 meant the most vulnerable customers.

19 MR. CAMPBELL: Commissioner Shiroma,  
20 this is Stephen. May I ask for a quick  
21 response, very quickly?

22 COMMISSIONER SHIROMA: Okay. Who's  
23 speaking?

24 MR. CAMPBELL: Stephen Campbell with  
25 GRID Alternatives.

26 COMMISSIONER SHIROMA: Oh, yes.  
27 Certainly.

28 MR. CAMPBELL: Just really quick.

1 Thank you very much.

2 I would say regarding SGIP, it's a  
3 market transformation program. It's not a  
4 low-income program. So even though it's  
5 great that the majority of money is in -- in  
6 market -- was reserved for income-qualified  
7 customers, there's still barriers that a  
8 market transformation program will have  
9 difficulties being successful with, primarily  
10 marketing, education, and outreach.

11 That is a main very, very critical  
12 component of low-income programming because  
13 that is a very large cost of any install,  
14 dollar-per-watt, customer acquisition,  
15 especially the hard-to-reach communities  
16 across a very large state.

17 This is a critical path that the  
18 Commission really does need to figure out how  
19 to fund ME&O in a market transformation  
20 program if that's available, otherwise we  
21 worry that the money, while it's great,  
22 well-intentioned, could sit there or maybe go  
23 to the wrong customers as it did in the last  
24 round. Thanks.

25 COMMISSIONER SHIROMA: Thank you.

26 Thank you, everyone.

27 ALJ HYMES: Commissioner, do you have  
28 any further questions?



1           COMMISSIONER SHIROMA: No. Back to  
2           you, Judge Hymes. Thank you.

3           ALJ HYMES: Okay. Thank you.

4           Then finally, the assigned  
5           Commissioner, President Reynolds.

6           PRESIDENT REYNOLDS: Thank you, Judge  
7           Hymes. I do have a few questions.

8           The first one is for Susan Tierney.  
9           I think I heard you correctly in noting that  
10          the five-year glide path that is proposed in  
11          the PD is very long, and so I wanted to ask  
12          about the proposal for a glide path in the  
13          form of ACC Plus that lasts five years for  
14          new customers and would be stepped down  
15          20 percent per year until they've reached the  
16          APC amount.

17          Could you just elaborate on why you  
18          think the five-year time period is too long  
19          and the length of time for allowing the  
20          industry to transition, while also taking  
21          into account the need to control costs. I  
22          just wanted to hear a little bit more about  
23          that. Thanks.

24          MS. TIERNEY: Thank you for that  
25          question. My earphones have run out of juice  
26          after this time. Can you hear me okay?

27          PRESIDENT REYNOLDS: Yes.

28          MS. TIERNEY: Okay. A couple of

1 reasons; one, as we know, the net metering  
2 program has been in place for 25 years. In  
3 some sense, there is a lot of history in the  
4 transition that has been under way. So  
5 extending a number of years beyond this  
6 really is icing on the cake in some sense  
7 because people have been on notice there need  
8 to be reforms and that there are costs that  
9 are being borne by nonparticipants.

10 Second, I think the glide path is  
11 long in light of the -- the discussion that  
12 was just under way about the assumptions in  
13 the avoided cost calculator and how they are  
14 conservative in light of the assumptions  
15 about electricity prices not going up in  
16 California.

17 They are also not inclusive of the  
18 kinds of financial incentives that one would  
19 expect to be in place as a result of not only  
20 California's taxpayer-funded incentives, but  
21 also federal incentives for tax credits for  
22 investment in solar and storage.

23 As I mentioned very briefly, the new  
24 Greenhouse Gas Reduction Fund that is funded  
25 by congress and that is separate from the tax  
26 credit program is one where there will be  
27 \$27 billion invested across the country in  
28 terms of helping to accelerate investments

1     that -- and grants in some sense -- for a  
2     significant portion of the country's  
3     disadvantaged and low-income consumers in  
4     adopting things like rooftop solar, energy  
5     efficiency storage, and other things.

6             So there are a number of things --  
7     ways in which we have these external things  
8     happening that will contribute to having a  
9     relatively promising payback period for solar  
10    customers without such a long payback period.

11            So I hope that that's responsive and  
12    I'm happy to add to that in comments, in  
13    written comments.

14            PRESIDENT REYNOLDS: Thank you. That's  
15    very helpful.

16            I have a question now for NRDC and,  
17    again, further elaboration on statements that  
18    you made in your comments. What I heard is a  
19    reference to the proposed decision furthering  
20    decarbonization goals by including --  
21    encouraging customers to adopt electric  
22    vehicles and appliances.

23            Could you talk about what you  
24    anticipate the effects will be of the  
25    proposed decision on greenhouse gas emissions  
26    and other environmental outcomes, so a little  
27    bit more on environmental benefits of the  
28    proposed decision.

1           MR. CHHABRA: Thanks for asking that  
2 question, Commissioner.

3           So the first part of my comment was  
4 the new proposed decision's impact on  
5 mitigating cost increases will make it easier  
6 for the state to decarbonize. The reason is  
7 that we need affordable electric rates in the  
8 absolute for decarbonization to be affordable  
9 because customers who electrify should pay  
10 less on their electricity bills than the  
11 energy bills of today.

12           Second, electricity consumption  
13 rates need to be cheaper than gasoline and  
14 natural gas.

15           That's the overarching concern about  
16 rates from a broader decarbonization  
17 perspective. Because everyone can't get  
18 rooftop solar, the majority won't be able to,  
19 we need rates for them to be kept in check.

20           Now, secondly, the fact that this  
21 new net billing tariff encourages storage by  
22 providing higher compensation for  
23 self-consumption, especially in the evening,  
24 that means that customers will use onsite  
25 energy and self-consume it at a time when the  
26 grid is most strained and polluting resources  
27 are most at the margin.

28           So these things combined make net

1 billing tariff better aligned than our  
2 broader decarb goals. And our hope is that  
3 further reform to rates through the rate's  
4 flexibility proceeding will bring retail  
5 rates where they need to be to get to our  
6 broader goals.

7 Does that help?

8 PRESIDENT REYNOLDS: Yes, very much.  
9 Yeah. Thank you very much.

10 MR. CHHABRA: Thank you.

11 PRESIDENT REYNOLDS: Now I wanted to  
12 ask a question to Matt Baker from the Public  
13 Advocates Office and potentially Dr. Peterman  
14 if she has anything to add.

15 I'm interesting in hearing a little  
16 bit more about the need to encourage  
17 electrification and encourage customers to  
18 use price signals to align solar and battery  
19 storage with grid needs. We heard today that  
20 there may be some difficulty in programming  
21 batteries too quickly to make sure that  
22 they're working at the right time and that  
23 our signals are actually being taken into  
24 account so that batteries do support grid  
25 needs.

26 I was wondering if you wanted to  
27 respond to that comment and also, in  
28 particular, ask if you're supportive of the

1 movement to electrification rates that are a  
2 part of the proposed decision and a  
3 component -- really a component that was  
4 meant to bring the net billing tariff in line  
5 with our modern grid.

6 So if you could elaborate a little  
7 bit more on those points. Thank you. And  
8 starting with Mr. Baker.

9 MR. BAKER: Thank you, President  
10 Reynolds.

11 I'll take the question kind of  
12 backwards in that we do think the movement to  
13 electrification rates does help those for  
14 costs, reliability, and for the reasons that,  
15 you know, NRDC outlined also for climate  
16 benefits. We think that is an important part  
17 of the decision.

18 And, you know, over time we'd like  
19 to see everyone, you know, move into that,  
20 you know, move into that rate cost. I will  
21 have to confess that we will need to do a  
22 little bit more analysis on the, you know, on  
23 the assertion that it will be difficult to  
24 program batteries for this, and I think we  
25 could look for a more -- a better answer from  
26 me on that in our comments. Thank you.

27 MS. PETERMAN: President Reynolds,  
28 thank you for the opportunity to offer

1 comment on this.

2 First of all, we know that batteries  
3 now can respond to time-of-use pricing, and  
4 the pricing that's proposed in the decision  
5 is hourly. Those ACC prices will be known in  
6 advance. I think the comment that you heard  
7 from solar -- it might have been Brad --  
8 talked about a minute-by-minute response.  
9 That's not what's expected or anticipated  
10 with this rate.

11 So based on what I know at this  
12 point, batteries should be able to respond  
13 and we can expand upon that in comments.

14 To the second -- well, the other  
15 part of your question around support for  
16 electrification rates, we very much support  
17 having an electrification rate and appreciate  
18 that.

19 I think one of the challenges is it  
20 only relates to the import, and so we want to  
21 make sure that it's important still to have  
22 the fixed charge because otherwise you're  
23 still not capturing a lot of the clear grid  
24 charges that other customers are paying for.

25 And to be really clear, we're very  
26 supportive of a fixed charge for all  
27 customers. We think that is an appropriate  
28 direction for the Commission to go so we're

1 supportive of that rulemaking and that  
2 examination. We want to make sure as we do  
3 that for all customers, that NEM customers  
4 are a part of that solution as well.

5 MR. HEAVNER: President Reynolds, can I  
6 clarify the comment on battery programming?

7 PRESIDENT REYNOLDS: Sure. Please go  
8 ahead.

9 MR. HEAVNER: Yeah, Brad Heavner,  
10 CALSSA.

11 The point was just that the E3 model  
12 is overly aggressive in calculating payback  
13 periods. It's absolutely true that batteries  
14 today could be programmed ahead of time on an  
15 hourly basis or a time-varying basis based on  
16 rates that you publish. So I would expect  
17 that would be the response from this PD.

18 We'd look a year in advance and  
19 program a battery every day, here is when  
20 it's going to discharge during certain hours  
21 or time periods.

22 What the E3 model assumes we can do  
23 is actually follow load and export only when  
24 the load is zero within a billing interval.  
25 So actually having measurement to say, "Here  
26 is a minute when the customer is not using  
27 energy, I'm going to discharge the battery  
28 then and export for during a high-value



1 hour."

2 That's not really necessarily good  
3 for the grid, and it's not something we  
4 should expect them to be capable of right  
5 away. It's just a matter of the payback  
6 measurement in the E3 calculator was the  
7 comment.

8 PRESIDENT REYNOLDS: Okay. Thank you  
9 for the clarification. That's helpful.

10 Judge Hymes, I have no further  
11 questions.

12 ALJ HYMES: Okay. Thank you.

13 Thank you, everyone. I just want to  
14 give you all a reminder that opening comments  
15 on the proposed decision are due on  
16 November 30th and replies are due on  
17 December 5th. And, again, the proposed  
18 decision is currently scheduled to be  
19 considered by the Commission on  
20 December 15th.

21 I wanted to also ask are there any  
22 procedural questions from the parties? If  
23 there are procedural questions, please raise  
24 your hand.

25 Mr. Belur.

26 MR. BELUR: I apologize. That's not a  
27 hand raised.

28 ALJ HYMES: Okay. Thank you.

1 I see no other hands. Are there any  
2 questions from the Commissioners?

3 MR. BOYD: Your Honor?

4 ALJ HYMES: Yes.

5 MR. BOYD: Your Honor, I have a  
6 question, a procedural question. Will there  
7 be a transcript available for this argument  
8 to the parties?

9 ALJ HYMES: I believe that the  
10 reporters had put out an opportunity to  
11 request that transcript. I do not know if  
12 that -- if anyone has requested it.

13 MR. BOYD: Okay. Well, I'd like a  
14 transcript if it's possible before the  
15 comments are due. That would be helpful.

16 ALJ HYMES: Thank you. I will ensure  
17 that you receive the e-mail for that.

18 MR. BOYD: Okay. Thank you, your  
19 Honor.

20 ALJ HYMES: You're welcome.

21 Are there any other questions from  
22 the Commissioners before we end for the day?

23 (No response.)

24 ALJ HYMES: Hearing none, then we've  
25 completed our itinerary for the day. Again,  
26 thank you all for your participation. Thank  
27 you to members of the public who have joined  
28 us. There being no further business before

1 the Commission, we are adjourned. We'll be  
2 off the record. Thank you again.

3 (Whereupon, at the hour of 12:26  
4 p.m., this matter having concluded,  
the Commission then adjourned.) ]

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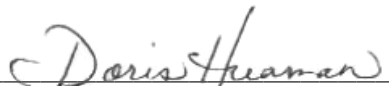
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